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OXFORD REGIONAL TRAINING COURSE IN CLINICAL PSYCHOLOGY

Doctorate in Clinical Psychology

**Understanding the factors which influence learning disability
direct care staff to spend time in 'focused 1:1 work' with clients :
An application of the theory of planned behaviour**

Paul Flecknoe

1995 Intake

**Dissertation submitted in part fulfilment of Open University Validation
Service/British Psychological Society Doctorate in Clinical Psychology**

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Abstract

This study aimed to examine the factors that influence learning disability care staff to spend time with clients that is focused on their developmental needs, rather than the routine, custodial tasks of care. This type of individualised time is defined for the study as time spent in 'focused 1:1 work' with clients, and a detailed definition is developed. The value of time spent individually with clients is considered in relation to current service philosophies, the understanding of challenging behaviour and in terms of the satisfaction that staff derive from this aspect of their work.

The theory of planned behaviour is suggested as a framework within which this issue can be investigated. It is noted that this study constitutes the application of the theory to a repeated behaviour, which has specific associated methodological issues.

A questionnaire, based on the theory of planned behaviour, was developed, to try and understand the factors that might predict staff members' intentions and behaviour as regards spending time in focused 1:1 work with clients. In addition, a measure of job satisfaction was included to assess the previously reported relationship between client-centred aspects of care work and job satisfaction.

Overall, results indicated that perceived behavioural control was the most important factor in understanding time allocation to this activity. This variable accounted for 35 percent of the variance in behavioural intention. The implications of this result in terms of interventions involving learning disability staff and service development are considered. Possibilities for future research are outlined.

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1) Introduction

In this section the area for investigation is first outlined. Social, political and organisational developments in services for people with learning disabilities are then summarised. It is argued that in the context of these developments, individualised care for people with learning disabilities is of increasing importance. The relevance of individualised care, and individualised time spent with clients is then considered in relation to service quality, staff performance and functional analyses of challenging behaviour. It is argued that individualised time spent with clients is thus a legitimate area of study. Existing, related studies of staff-client interaction are reviewed, and it is noted that no existing studies have considered this issue from the perspective of the individual staff member. The theory of planned behaviour is described and suggested as a framework for investigation from this perspective. Empirical support for the theory is briefly reviewed, and methodological issues pertinent to the theory considered. The present study is then described, and research questions and hypotheses presented.

1.1) Area of Investigation

In residential community settings for people with learning disabilities, it is widely accepted that the time spent by members of direct care staff with clients is a valuable component in delivering a good quality service. Of particular importance, for staff and clients, is the time spent individually with clients which goes beyond the routine, custodial, aspects of care. It is this individualised time spent with clients, focused on their developmental needs, which is the topic investigated in this study. The aim is to develop an understanding of the factors which influence how much time staff members spend in this way and the relationships between this aspect of the work and job satisfaction for the member of staff.

1.2) Definitions

To facilitate discussion in this section, brief definitions for a number of terms are provided. The definitions are intended to cover the range of different studies and sources considered in this section. Detailed definitions and inclusion criteria related specifically to this study are presented in the method section.

A residential community setting for people with learning disabilities is defined as any staffed service for people with learning disabilities which provides a permanent residence located in a residential area.

Direct care staff are defined as all paid members of staff who have direct contact with clients in a caring role, and who work exclusively in a residential setting.

Focused 1:1 work is a concept, developed for the study, which reflects the time spent by individual staff members with individual clients, where the focus of the work is the developmental needs of the client. The development of this concept is described in the method section, and a full definition is presented in appendix 4.

Job satisfaction is defined by Spector (1997) as follows :

"Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs....Job Satisfaction can be considered as a global feeling about the job, or as a related constellation of attitudes about various aspects or facets of the job." (Spector, 1997, p. 2).

In this study, two aspects of job satisfaction are considered. Firstly, the overall sense of liking or disliking one's job, which is referred to as global job satisfaction. Secondly, satisfaction with the nature of the work undertaken, which is defined as intrinsic job satisfaction for the purposes of this study.

1.3) Residential Care for People With Learning Disabilities

1.3.1) Social, Political and Organisational Developments

During the past three decades, residential care for people with learning disabilities has changed radically. Thirty years ago, care was provided in large scale institutions until a series of studies and scandals focused attention on the quality of the care they provided (DHSS, 1969; Martin, 1986; Morris, 1969; Tizard, 1964). Subsequently, a series of studies and developments in national policy has seen the closure of many long-stay hospitals and the provision of care in smaller-scale, community settings. A government White Paper, "Better Services for the Mentally Handicapped" (DHSS, 1971) recommended that local authority places should expand by 6 times, and that hospital places should be reduced by 50%. At this stage, community care simply implied any care not provided in a large hospital.

The Jay Report, 1979, examined the developments in care for people with learning disabilities in the light of policy developments and recommended that care should be delivered in "adapted houses which are physically integrated into the community" (Jay Committee, 1979, p.35). This trend in policy was continued by the Griffiths report on community care (Griffiths, 1988), and consolidated in the White Paper 'Caring for People' (Secretaries of State, 1989) and the NHS and Community Care Act (Department of Health, 1990). The historical trend in all these developments was for people with learning disabilities to be provided with care in the community, in ordinary housing wherever possible, and with local authorities as the lead agencies with responsibility for providing that care. Although these transitions are continuing to take place, many large institutions have been closed, and clients relocated to smaller community-based settings. These range from small ordinary houses, with and without staff, to larger units, which in some cases resemble smaller institutions.

Changes in the concepts and philosophies that influence service delivery have paralleled the changes in official social policy. Normalisation (Wolfensberger, 1972) has been perhaps one of the most influential. Although a full discussion is beyond the scope of this work, normalisation aims to value positively devalued individuals and groups of people at individual and societal levels. This has led to services striving to base practice on values such as dignity and respect, community presence, community participation, and choice and competence (O'Brien, 1986). This is reflected explicitly in some of the policy documents. For example, the Jay Report (Jay Committee, 1979) incorporated three principles including the right of people with learning disabilities to a normal pattern of community living, the right to be treated as individuals, and the need for additional support from the community to fully develop. In addition, documents written to inform service planning such as "An Ordinary Life" (King's Fund, 1980) also reflect these ideas, and have been highly influential. There is an increasing interest in the quality of life of people with learning disabilities (Brown, 1997), and a resultant emphasis on individual experience, choice, and a detailed knowledge of individuals.

1.3.2) Implications for Direct Care Staff

For direct care staff, these developments have led to a move away from providing largely custodial care on a ward with many other staff and limited client contact. Staff now increasingly work in smaller residential community settings where they are required to fulfil many different roles, in a more facilitative client-centred style. Mansell, Felce, Jenkins, de Kock, and Toogood (1987) note that :

"The central feature of the job expected of people working in staffed houses is that they support the people they serve in the full range of activities and tasks involved in a rich and varied lifestyle." (Mansell et al., 1987, p.103)

Allen, Pahl, and Quine (1990) conducted a comparative study of staff working in institutional and community settings. The results suggested that the community staff experienced their work as more demanding, with more variety in work tasks, greater

levels of interaction of clients, less interaction with other staff members, and increased role ambiguity.

McVilly (1997), conducted a survey of 86 community residential staff regarding their views about work and needs for training. One of the findings reflected confusion about the implementation of normalisation principles. It was suggested that staff would benefit from greater levels of support and training in the translation of values-based service philosophies into daily practices relating to individual clients. It was also found that there were training needs in the areas of communication, and skills teaching strategies.

It would seem that, for staff, the implications of the developments in residential service provision for people with learning disabilities are considerable. Their new roles are challenging, with an increased sense of ambiguity and greater variety in work roles. Although levels of interaction with clients are increased, new service philosophies are sometimes confusing to implement, and training is perceived as inadequate in some areas.

1.4) The Importance of Individualised Care

A key theme in the developments supporting the move to community care is the importance of providing care that is tailored to the developmental needs of the individual. This is central to the philosophy of normalisation, since services based around individual needs deconstruct the idea that people with learning disabilities are 'all the same', and promotes the more valued perspective of recognising the uniqueness of each person.

For community services, this has implications for almost all aspects of care. Individual needs around personal relationships, leisure activities, learning skills and all other

aspects of life need to be considered by services. If individualised care is to be facilitated rather than imposed, then providing choice is a vital aspect of this process.

This is reflected in current services in different ways. Clients are increasingly empowered to make decisions about personalising their environment, including choices about decor, purchasing clothes, and even recruiting staff. Many organisations now include a formal system of planning for individual needs such as Individual Programme Planning (IPPs, e.g. Blunden, 1980). These systems usually include a keyworker to build a close relationship with the client and assess their needs, and regular formal IPP meetings to provide a structure within which the needs of the individual are considered systematically.

1.4.1) Significance for Service Quality

Given the central role of individually-tailored care in current community services, it would seem reasonable to suggest that the time staff spend with clients is of value both in developing an accurate understanding of the needs of the individual, and, where appropriate, in facilitating the person's continued development. It could be argued that this applies particularly to focused 1:1 work, when a member of staff can best devote their attention to understanding the developmental needs of just one individual.

This perspective is reflected in different ways in the literature. Skills teaching has been demonstrated to be more effective on a 1:1 basis (Jenkins, Mayhall, Peschka, & Jenkins, 1974), and this is often reflected in recommendations for practice (Mansell *et al.*, 1987). 'Room management' (Porterfield, Blunden and Blewitt, 1980) is a technique which seeks to maximise the amount of 1:1 time available in the overall context of a group without detriment to the remaining clients in the group. The existence and success of this technique (Crisp and Sturmey, 1984) implicitly reflect the importance of providing clients with 1:1 time.

In some cases, the issue of spending 1:1 time with clients is specifically addressed. Wertheimer (1989) describes the evaluation of two services using the Program Analysis of Service Systems (PASS, Wolfensberger and Glenn, 1975). PASS is an intensive evaluation system which is based on the principles of normalisation and assesses the extent to which the services create valued environments and social roles for their clients. In considering the issue of individualisation, the evaluation team suggested that :

"Wherever possible, activities should be undertaken on a one-to-one basis or in small groups. This is particularly important when people are going out into the community in order that other people may see them as individuals rather than part of a 'handicapped group'". (Wertheimer, 1989, p.19).

Regarding the issue of staff development, the evaluation team suggested that a key worker system be implemented, and recommended that :

"Services need to be organised so that time is set aside for key workers to spend time with 'their' client on a regular basis. Room management is one technique which can be used to enable staff to do this". (Wertheimer, 1989, p.59).

Hence, in good-quality services, organised around the developmental needs of the individual, 1:1 time spent with clients is an important aspect of the delivery of care.

1.4.2) Relevance to Functional Analyses of Challenging Behaviour

Behavioural theory has been most influential in the treatment of people with learning disabilities over the past three decades. In its simplest form, it proposes that challenging behaviour is an operant that is developed and maintained by processes of positive and negative reinforcement. Within this framework, further detail is provided by subsequent analyses of the types of reinforcers maintaining the behaviour for each individual. This enables a hypothesis to be developed about the function of the behaviour for a given individual. A common functional category for the reinforcers maintaining a given behaviour is that of 'social-attention' where a given behaviour is

maintained by its property of precipitating some form of interaction or attention, usually from a member of staff (e.g. Iwata, Pace, Dorsey, Zarcone, Vollmer, Smith, Rodgers, Lerman, Shore, Mazaleski, Goh, Cowdery, Kalsher, McCosh, & Willis, 1994).

In considering the case of challenging behaviour maintained by the functional category of social attention, Oliver (1993; 1995) offers a development of these ideas. He suggests that the maintaining contingencies can only be considered in relation to the frequency of the reinforcer in the general environment, and that the challenging behaviour is only reinforced and maintained in a context of reinforcer deprivation. In other words, challenging behaviour is only maintained by social-attention when there is a relative lack of this in the general environment. Hence, regular, non-contingent periods of time spent with others, usually staff members, would be an important part of treatment and maintenance programmes, and would also function preventatively.

In this framework, focused 1:1 work with clients should function positively in the prevention and treatment of challenging behaviours which are maintained by the functional category of social-attention, by helping provide environments relatively 'rich' in this type of reinforcer. It is not suggested, however, that periods of interaction with clients should be rigidly imposed as some challenging behaviours could be maintained by negative reinforcement (escape and avoidance). In this situation challenging behaviour may be increased by the additional 'demand' of interactions or attention from staff. It is therefore important to remain aware that treatment decisions need to be based on functional analyses for individual clients (Oliver & Head, 1990).

1.4.3) Significance for Staff

In addition to the needs of the clients and the quality of the service, 1:1 time spent with clients may be of intrinsic value to the staff themselves. Accounts of intrinsic job

satisfaction in different forms of care work are often dominated by the client-centred aspects of the job. In a study of job satisfaction of residential care workers in three different local authorities, Penna, Paylor & Soothill (1995) found that contact with clients was the most important aspect of job satisfaction. Specifically, this related to contact in the context of a caring role, appreciative feedback from clients, and satisfaction related to seeing improvements and developments in the clients they cared for. Similar themes were present in the comparative study of staff in hospital and community settings (Allen *et al.*, 1990), and in other studies involving staff in caring roles (Benton & White, 1972; Nnadozie & Eldar, 1985). In a survey of 48 primary community care-givers including foster parents and staff in residential community settings, many respondents indicated that "they wished their responsibilities would permit more time for interacting with and/or instructing residents" (Felsenthal & Scheerenberger, 1978, p. 18), and ranked tasks involving contact with clients as the most important aspects of their work.

Hence, it seems reasonable to suggest that time spent in focused 1:1 work with clients is valuable to the staff themselves, in terms of intrinsic job satisfaction. In turn, the job satisfaction levels of the staff may be important to the organisation given the demonstrated relationships between job satisfaction and rates of absence, staff turnover and burnout (Spector, 1997). However, given the demanding nature of direct care work in community settings, it is possible that it is difficult to decide how much time to allocate to this aspect of the job, and that some members of staff may be in the position of feeling deprived of opportunities to engage in this valued activity. In addition, it is possible that while time spent in focused 1:1 work is regarded as valuable, it may also itself be demanding for staff members to engage in.

Many other factors also contribute to an understanding of job satisfaction. Of relevance to this study, are the findings that suggest a relationship between perceived

control over work decisions and job satisfaction. In a meta-analysis, Spector (1986) found that perceived control correlated significantly with both global and intrinsic measures of job satisfaction. The relevance of these findings to this study is discussed later, in the context of the theory of planned behaviour.

1.5) Research Related to 1:1 Work

Overall, from a number of different perspectives, it can be argued that staff time spent in focused 1:1 work with clients is a valuable activity and therefore worthy of study. At the same time, the multiple demands of care work mean that a wide range of factors and competing demands may influence the amount of time spent on this aspect of the work. However, extensive literature searching has revealed only a limited number of related studies, which are reviewed below.

1.5.1) Observational Studies of Staff-Client Interactions

These studies typically consider levels of staff-client interaction in different settings, rather than focused 1:1 work specifically. However, their findings do raise a number of interesting questions.

Hile & Walbran (1991) observed direct care staff on 13 living units of a 'large state-operated residential facility' for 20 consecutive days, coding their behaviour into nine different categories of activity. The staff were engaged in potentially interactive activities with clients for 52% of the observed time, although this included the category of 'supervision' which could include relatively passive behaviours, such as simply watching over a client engaged in some task. If this were dropped from the calculations, the more interactive categories of socialisation and training accounted for 20% of the time. 'Leisure time', which described a nonjob related staff activity such as chatting to other staff socially, also accounted for 20% of the observed time. Of particular interest was the finding that when the staff:client ratio was higher, staff

members were more likely to engage in their own leisure activities. The authors conclude by suggesting this trend is reduced by assigning small numbers of residents to individual staff members in relatively secluded settings.

Abraham, Lindsay & Lawrenson (1991) conducted a similar study, across four different contexts, from a ward in a traditional institution to a social work hostel. Similar results were found, although socialisation was uniformly higher than in the previous study, accounting for approximately 25% of staff time. The main differences were that staff in the less institutional contexts tended to spend less time in their own leisure activities, and more in supervision and unit management. If one considers the conditions of hostel-type accommodation to be similar to the recommendations made in the previous study to reduce the amount of leisure time, the findings seem consistent.

Mansell and Beasley (1993) evaluated the effectiveness of community based services, in the form of small staffed houses, for people with severe or profound learning disability and very serious challenging behaviour. The study followed clients for three years during the process of transition from hospital ward to staffed house. The study found that the staffed houses offered an improved caring environment when considered in terms of the level of client engagement in meaningful activity, and the levels of contact with staff. Although the small staffed houses had higher staff:client ratios, the authors conclude by suggesting that the actual performance of the staff members was as influential in the success of the project as environmental manipulations such as the physical living environment or the staff:client ratio.

This conclusion was reinforced by a study by Felce & Perry (1995). They conducted observations in 15 small staffed houses, and related the results to a number of different factors including staff:client ratios. Even when the ratios were allowed for, the

percentage of time each staff member spent interacting with residents varied fivefold (12-65%, mean 27%), suggesting that the time spent in interaction with clients was more than simply a function of staff:client ratios. The authors suggest that managerial style, working methods, and staff training could be equally as important as the nature and size of the settings, and the staffing levels, and warn against trying to enhance service quality by increasing staff levels alone.

In as much as one accepts that interaction relates to the concept of focused 1:1 work, these studies suggest that the determining factors in understanding how much staff time is allocated to this activity go beyond staff:client ratios.

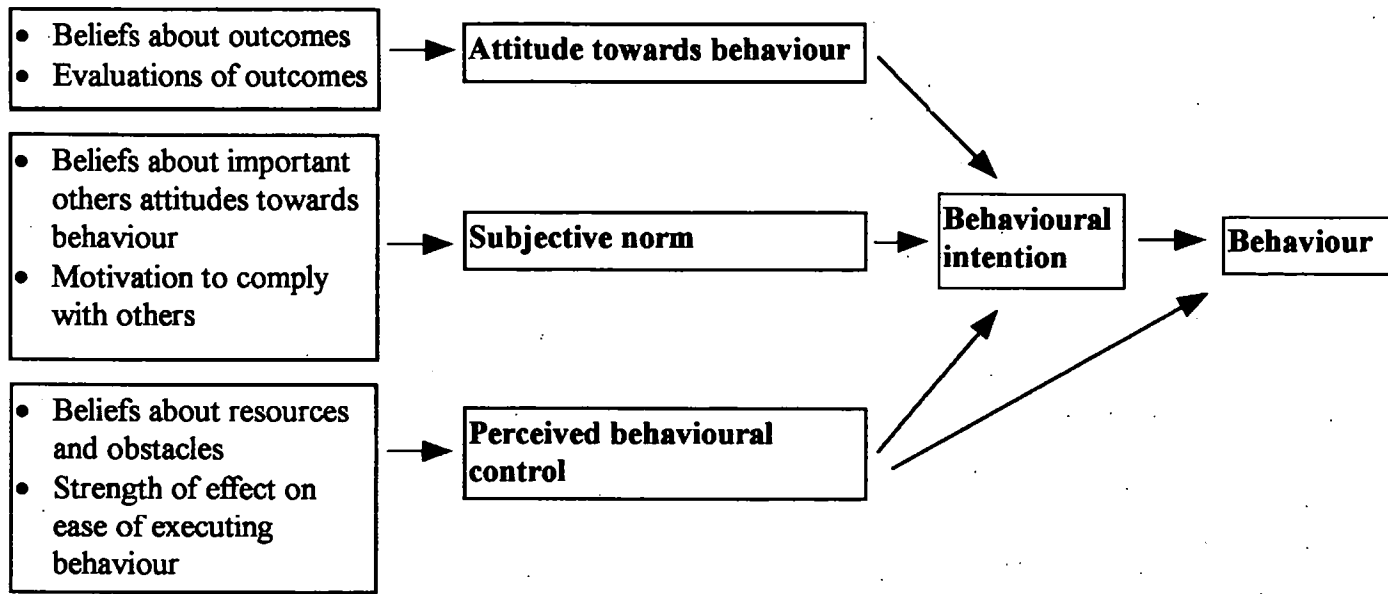
To date, there appear to be no studies that have addressed the issue of how staff allocate their time. In addition, what studies there have been are merely observational, reporting the amount of time spent in interaction, but not investigating the factors behind this, particularly from the staff's perspective. On this basis, it is proposed that staff time allocation could be usefully studied by considering it a process of decision making in a situation constrained by personal, social and resource-related factors.

1.6) The Theory of Planned Behaviour - A Theoretical Framework

1.6.1) Description of The Theory of Planned Behaviour

The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen, 1985, 1988, 1991; Ajzen & Fishbein, 1980; Ajzen & Madden, 1986; Fishbein & Ajzen, 1975) made necessary by the original model's limitations in dealing with behaviours over which people have incomplete volitional control. Figure 1 depicts the theory in the form of a structural diagram :

Figure 1 - Theory of Planned Behaviour



A central factor in the theory of planned behaviour is the individual's intention to perform a given behaviour. Intention can be conceptualised as the individual's plan of action in respect of a given behaviour, and is considered the immediate antecedent of the behaviour itself.

The model postulates three conceptually independent determinants of intention. The first is the *attitude towards the behaviour*, and refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question. The second predictor is a social factor termed *subjective norm* which refers to the perceived social pressure to perform or not perform the behaviour. The third antecedent of intention is the degree of *perceived behavioural control*, which refers to the perceived ease or difficulty of performing the behaviour and is assumed to reflect past experience as well as anticipated impediments or obstacles. In as much as the perception of control is accurate, this variable may also reflect actual control, and therefore exert a direct effect on behaviour.

In general, the more favourable the attitude and subjective norm with respect to a behaviour, and the greater the perceived behavioural control, the stronger should be the individual's intention to perform the behaviour under consideration. The relative importance of these three components is expected to vary across behaviours and situations. Hence, in some applications it may be found that only attitudes have a significant impact on intentions, in others that attitude and perceived behavioural control make contributions to the prediction of intention, and in still others that all three components make independent predictions. In applications of the theory, these variables are referred to as global, direct measures of attitude, subjective norm and perceived behavioural control.

The model also deals with the antecedents of attitudes, subjective norms and perceived behavioural control, in an attempt to explain behaviour, as well as predicting it. These antecedents are held to be salient beliefs related to the behaviour. Although people can hold a great many beliefs about a given behaviour, they can only attend to a relatively small number at any one time, and it is these salient beliefs that are considered to be the determinants of a person's intentions and behaviour. The theory suggests that beliefs can be distinguished as *behavioural beliefs*, influencing attitudes, *normative beliefs*, which determine subjective norms, and *control beliefs*, which provide the basis for perceptions of behavioural control.

Behavioural beliefs are conceptualised in line with Fishbein & Ajzen's (1975) expectancy-value of attitudes. Each belief is considered to be a multiplicative function of the probability of the behaviour leading to a given outcome, and a subjective evaluation as to the desirability of that outcome. The resulting products are then summed over the number of salient beliefs studied. *Normative beliefs* are the product of the perceived likelihood that important referent individuals or groups will approve or disapprove of the behaviour, and the person's motivation to comply with the

referent in question. The products are summed across the number of salient referents. To calculate *control beliefs*, the perceived strength of a factor to inhibit or facilitate performance of a behaviour is multiplied by the rated probability of occurrence of that factor, and products summed across the referent control beliefs. In the terminology of the theory, these are referred to as specific, indirect measures of attitude, subjective norm and perceived behavioural control. As they are considered to be the antecedents of the direct, global measures of these variables, they would be expected to correlate significantly with them.

1.6.2) Rationale for use

The theory of planned behaviour (Ajzen, 1988, 1991) was chosen to provide a theoretical framework in this study because it is a theory of decision-making about behaviour that takes account of a wide range of possible influences, including personal beliefs, social norms and perceptions of control. This reflects the complexity of the issue under investigation.

In addition, the theory has been applied to a wide range of behaviours in different settings with relative success. This suggests that there are reasonable grounds for expecting the theory to yield meaningful results in a relatively under-researched area.

1.6.3) Empirical Bases for Theory of Planned Behaviour

1.6.3.1) Overview

Ajzen (1991) reviewed 16 studies which attempted to apply the theory of planned behaviour to predict and understand people's intentions to engage in various activities. The studies considered a wide range of behaviours, ranging from engaging in exercise to searching for a job. The proportion of variance in intention measures accounted for by the model in the studies ranged from 18 to 88 percent, with an average of 50 percent. Perceived behavioural control made a significant contribution to prediction in

every study. Also, with only one exception, attitudes towards the various behaviours were also significant predictors. However, the results for subjective norms were mixed, with no clearly discernible pattern.

Behavioural intentions seem to be valid predictors of actual behaviour. Ajzen (1988) reported representative correlations between these constructs ranging between 0.72 to 0.96 for a variety of behaviours including having an abortion, smoking marijuana, attending church and voting in a presidential election.

The relationships between indirect, belief-based measures of attitude, subjective norms and perceived behavioural control and the global measures of these variables are, in practice, relatively modest. Ajzen (1991) reports average correlations of around .50 in each case, and suggests that these modest relationships might be because global measures evoke a relatively automatic response, and belief-based measures a relatively reasoned response.

1.6.3.2) Specific Studies

The theory of planned behaviour has now been applied to many different behaviours across a range of situations. It has been utilised particularly in the area of health-related behaviours. The components of the model have been differentially predictive of intention across different studies.

Giles & Cairns (1995) found that intentions to donate blood were predicted significantly by all three components of the model, but that perceived behavioural control accounted for the greatest proportion of the variance. The model was able to account for 61 percent of the donating intentions, and the correlation between intention and self-reported behaviour was .75.

Conner, Martin, Silverdale & Grogan (1996) found that the model predicted 51 percent of adolescents' intentions to diet, and that attitude was the most predictive component of the model. In this case, there was a correlation of .71 between intention and a self-report measure of behaviour.

In a study of the intentions of health professionals to discuss with patients the implications of having dementia, Whitehead (1997) found that the components of the theory explained 21 percent of the variance in intention. No measure of behaviour was included in this study.

Other examples include the study of driving violations (Parker, Manstead, & Stradling, 1995), visiting public houses (Traeen & Nordland, 1993), smoking (Godin, Valois, Lepage, & Desharnais, 1992), exercise (Terry & O'Leary, 1995), and testicular self-examination (Brubaker & Wickersham, 1990).

Overall, the theory has been successfully applied to a range of behaviours and contexts, often yielding significantly predictive results. In each study, the results indicate the most predictive component of the theory for the behaviour studied. This is useful, in that it enhances understanding of the behaviour, and provides a starting point for possible intervention and future research.

Many of the successful applications of the theory have been of relevance to clinical and health psychology. Most of the studies outlined above considered health-related behaviours, and the study by Whitehead (1997) investigated the work behaviour of clinical psychologists and nurses in relation to discussing the implications of dementia with their clients.

1.6.4) Methodological Issues in the Theory of Planned Behaviour

1.6.4.1) The Principle of Compatibility

To apply the theory successfully, its authors emphasise the need to adhere to this principle (Ajzen & Fishbein, 1977; Ajzen, 1988) which is defined as follows :

"...two indicators of a given disposition are said to be compatible with each other to the extent that their target, action, context and time elements are assessed at identical levels of generality and specificity. Further, consistency between two indicators of a disposition is a function of the degree to which the indicators are, in this sense, compatible with each other." (Ajzen, 1988, p. 96)

In practice this means that the behaviour studied needs to be carefully defined, and that all intentions, attitudes and other measures relating to the behaviour need to relate to that original definition.

For example, if the behaviour in question is smoking, then in context of the theory, one might consider smoking (action) one cigarette (target) in a pub (context) tomorrow night (time frame). Technically, all other factors, such as attitude, would need to relate specifically to smoking one cigarette in a pub tomorrow night rather than to 'smoking cigarettes' or 'smoking next week'.

The proponents of the theory emphasise that this principle needs to be carefully adhered to in order to maximise its predictive value. However, a significant number of studies violate this principle, especially when assessing the relationship between intention and actual behaviour. Courneya and McAuley (1993) reviewed studies in the physical activity domain and found that 16 out of 17 studies violated scale correspondence.

When considered carefully, it emerges that in many of these studies, this problem relates to another methodological issue in applying the theory of planned behaviour

(Courneya, 1994). This is the application of the theory to repeated behaviours, which merits consideration in its own right.

1.6.4.2) Applying the Theory of Planned Behaviour to Repeated Behaviours

Many of the successful studies using the theory of planned behaviour, have focused on one-off behaviours that are either performed once in a given timeframe, or not at all. However, in many situations the issue of interest is how often a given behaviour is performed or how much time is devoted to it. In these cases, the theory stipulates that *different amounts of time spent engaged in the same behaviour need to be considered as different behaviours* (Fishbein, 1991).

To facilitate further discussion, it is necessary to consider different types of measures of intention and behaviour. Essentially, the main distinction is whether the measure is dichotomised or continuous. For a dichotomous measure, the amount or frequency of the behaviour is fixed at a given point, and the measure reflects an either/or choice in some form. For a continuous measure, the actual amount or frequency of the intended or actual behaviour is measured in some way. Examples of the two most common measures, dichotomous-graded, and continuous-open are provided in the Table 1.

Table 1 - Examples to Illustrate Different Measures of Intention and Behaviour

Type of measure	Example measure of intention	Example measure of behaviour
Dichotomous-graded	I intend to smoke 10 cigarettes tomorrow..... Agree 1 2 3 4 5 6 7 Disagree	I smoked 10 cigarettes yesterday..... Agree 1 2 3 4 5 6 7 Disagree
Continuous-open	I intend to smoke ___ number of cigarettes tomorrow	I smoked ___ number of cigarettes yesterday

In predicting intention, the theory of planned behaviour requires that the measures are either dichotomised, or that attitude, subjective norm and perceived behavioural control are assessed with respect to each amount or frequency of the behaviour. In many of the studies applying the theory of planned behaviour to a repeated behaviour,

intention is assessed with dichotomous-graded scales, and actual behaviour with continuous-open scales. Technically, this is a violation of scale correspondence, and would be expected to reduce the prediction of behaviour from measures of behavioural intention.

This is further complicated by the fact that even when scale correspondence is not violated, different types of measure predict behaviour differentially. Courneya (1994) conducted a detailed study of this issue, in relation to engagement in physical activity. He concluded that the optimum intention-behaviour relationship was provided when both were measured on continuous scales. However, the theory of planned behaviour does not offer a practical solution to predicting continuous measures of intention, without assessing attitude, subjective norm and perceived behavioural control with respect to each amount or frequency of the behaviour, which would not be feasible in practice. Despite this, the assertion that measures of the theory components with respect to a given amount of a behaviour would not predict a continuous measure of intention remains an untested assumption of the theory to date. In addition, even when scale correspondence *is* violated, and dichotomous measures of behaviour are used to predict continuous measures of behaviour, the relationships remain significant. In Courneya's study, a significant correlation of .51 was found between dichotomous-graded measure of intention, and a continuous-open self-report measure of behaviour.

In the present study, the issue of interest is the amount of time staff spend in focused 1:1 work with clients. As such, it is an application of the theory of planned behaviour to a repeated behaviour. In its present form, the theory stipulates that attitude, subjective norm, perceived behavioural control and intention need to be assessed in relation to a given amount of time spent in focused 1:1 work with clients. Hence, an amount of time spent in focused 1:1 work would need to be selected that would promote reasonable variability in a dichotomous-graded measure of intention. If a

continuous-open measure of intention were included in the study it would also provide an opportunity to test the assertion that intention measured in this way is not predicted as effectively from the theory components. The most desirable measure of behaviour seems to be a continuous-open measure, although this technically violates the principle of compatibility when considering relationships with a dichotomous-closed measure of intention.

1.6.4.3) Reliability

Most studies based on this theory are questionnaire driven. As with any other questionnaire it is of value to establish the basic psychometric 'credentials' of any measure generated. Other studies have established that their questionnaires had acceptable levels of internal consistency as measured by alpha coefficients. For example, Terry and O'Leary (1995) had an alpha coefficient of 0.77 for the questionnaire used in their study. It is also desirable to assess test-retest reliability, although few existing studies report this. Whitehead (1997) reported that 67 out of 69 items on the questionnaire used in her study were not significantly different when re-tested at an interval of between two to eight months.

1.7) Current Study

1.7.1) Summary and Rationale

A very clear culture of working with, and treating people as individuals has developed in learning disability services. The 'received wisdom' is focused 1:1 work with clients is most beneficial to client development, and satisfying for staff. This approach has been underpinned by the ideology of Normalisation (Wolfensberger, 1972), while research has demonstrated the benefits of individualised work for clients (e.g. Jenkins *et al.*, 1974), staff (e.g. Penna *et al.*, 1995) and the understanding of challenging behaviours (e.g. Oliver, 1993; 1995). However, although there has been research indicating the variance in the time spent by staff in 1:1 work (e.g. Felce & Perry, 1995)

there appears to have been no research focused on the factors that determine how staff make decisions about allocating their time to this valuable activity. In particular, the relationship between staff:client ratio and the amount of time spent by staff with clients is complex, and determined by poorly understood mediating variables. At the same time, direct care staff undertake an increasingly demanding role, with multiple pressures on their time, and a wide variety of work tasks to attend to on each shift (Allen *et al.*, 1991).

The theory of planned behaviour (Ajzen, 1985, 1988, 1991; Ajzen & Madden, 1986) offers a theoretical framework within which to study decision making. The theory has been applied to a wide variety of behaviours and situations with relative success (e.g. Ajzen, 1991; Giles & Cairns, 1995) and offers both the prediction and understanding of behaviour from direct and belief-based measures of attitude, subjective norm and perceived behavioural control. In applying the theory to repeated behaviours, it is noted that it is a requirement to measure the theory components in relation to a specified amount of the behaviour studied (Fishbein, 1991). This normally implies the use of dichotomised measures of behavioural intention, although these are not always the best predictors of behaviour. Continuous measures of behavioural intention are preferable (Courneya, 1994). The extent to which the theory components would predict continuous measures of intention has not been considered by research to date, and an empirical investigation of this issue would provide useful developmental information for the theory itself.

It is suggested that applying the theory of planned behaviour to the repeated behaviour of staff spending focused 1:1 time with their clients would provide an initial understanding of staff time allocation to a valued activity and as such would represent an original contribution to knowledge about this issue. In addition, it would contribute originally to the development of the theory of planned behaviour if relationships

between theory components and a continuous measure of behavioural intention were considered. In addition, by including a measure of job satisfaction, it would be possible to attempt to replicate the positive relationship between job satisfaction and time spent in client contact reported elsewhere, with specific reference to the amount of time spent in focused 1:1 work with clients.

1.7.2) Description of Study

This study aims to apply the theory of planned behaviour to understand the factors that influence the time staff spend in focused 1:1 work with clients. Given the nature of the work environment, where decisions are influenced by personal, organisational, and resource-related factors, it is hypothesised that all theory components will have predictive value as regards intention. By considering spending time in focused 1:1 work as a repeated behaviour, and by including both dichotomous-graded and continuous-open measures of behavioural intention, it is proposed to simultaneously investigate the methodological issue of whether the theory can predict continuous measures of behavioural intention. Currently, proponents of the theory predict that continuous measures of intention will be predicted less well by the theory components than the dichotomous measures, and this is adopted as a hypothesis. In considering the relationship between intention and actual *behaviour*, existing research (Courneya, 1994) suggests that a continuous measure of intention will predict behaviour better than a dichotomous measure. This is also included in the hypotheses for the study. Given the poorly understood role of staff:client ratio in understanding staff time allocation to focused 1:1 work, a measure of this will be included, conceptualised within the theory as a measure of *actual* control. Although current research is equivocal, it is hypothesised that staff:client ratio will add be of some predictive value in considering intention and actual behaviour. Finally it is proposed to include a measure of job satisfaction in the study. In line with existing studies, it is hypothesised

that there will be a relationship between job satisfaction and both behavioural intention and self-reported past behaviour. In addition, it is hypothesised that there will be a relationship between perceived behavioural control and job satisfaction, which would be expected from previous reports of measures of perceived control as a predictive factor in considering job satisfaction.

The study aims to take account of methodological issues by including a pilot phase for questionnaire development, checking the internal consistency of the questionnaire, and assessing test-retest reliability by re-contacting a sub-sample of the original participants. A measure of actual behaviour will also be included in the re-test phase of the study, by asking these participants to self-report on behaviour during the period of time for which intentions were assessed.

The study is of relevance to clinical psychology in that many clinical psychologists working in learning disabilities rely on members of direct care staff to implement clinical interventions. It is relatively common that these interventions have some implications for staff time allocation, and often include plans to increase the amount of contact between members of staff and the referred client. As such, the results of this study would inform that process. In addition, learning disability clinical psychologists sometimes facilitate interventions to improve the functioning of a staff team. These interventions often include some consideration of job satisfaction of the members of staff. Again, the results of this study would provide information relevant to these types of intervention. Finally, the theory of planned behaviour has been applied to behaviours of relevance to both health and clinical psychology. This study is designed to advance knowledge about this theory and is therefore of relevance to future applications of the theory to topics within clinical and health psychology.

1.7.3) Research Questions

- 1) What factors influence the time staff spend in focused 1:1 work with clients ?
- 2) How useful is the theory of planned behaviour in understanding this decision making process ?
- 3) Is job satisfaction related to time spent in focused 1:1 work with clients and perceived behavioural control ?
- 4) Can the theory of planned behaviour be used to predict a continuous measure of behavioural intention ?
- 5) Does a continuous measure of behavioural intention predict actual behaviour more effectively than a dichotomous measure ?

1.7.4) Hypotheses

1.7.4.1) Hypotheses Relating to Focused 1:1 Work

Hypothesis 1: There will be a positive association between attitude and behavioural intention.

Hypothesis 2 : There will be a positive association between subjective norm and behavioural intention.

Hypothesis 3 : There will be a positive association between perceived behavioural control and behavioural intention.

Hypothesis 4 : There will be a positive association between staff:client ratio and behavioural intention.

Hypothesis 5 : There will be a positive association between behavioural intention and actual behaviour.

Hypothesis 6 : There will be a positive association between perceived behavioural control and actual behaviour.

Hypothesis 7 : There will be a positive relationship between staff:client ratio and actual behaviour.

1.7.4.2) Hypotheses Relating to Job Satisfaction

Hypothesis 8 : There will be a positive relationship between past behaviour and job satisfaction

Hypothesis 9 : There will be a positive relationship between behavioural intention and job satisfaction.

Hypothesis 10 : There will be a positive relationship between perceived behavioural control and job satisfaction.

1.7.4.3) Hypotheses Relating to Methodological Issues in the Theory of Planned Behaviour

Hypothesis 11 : That theory of planned behaviour components will predict more of the variance of a dichotomous-graded measure of intention when compared with a continuous-open measure of behavioural intention.

Hypothesis 12 : That a continuous-open measure of intention will predict more of the variance in actual behaviour when compared with a dichotomous-graded measure.

2) Method

This section outlines :

- The experimental design of the study.
- Details about recruitment of the participants, and the inclusion criteria.
- The measures used, including an account of the development of the theory of planned behaviour questionnaire
- The preliminary pilot study
- The secondary pilot study
- Ethical approval for study
- Procedure for main study
- Test-retest procedures

2.1) Experimental Design

The study used a within-group, cross-sectional survey design. The questionnaires employed in the survey were the study-specific questionnaire based on the theory of planned behaviour, and the Job Satisfaction Survey (JSS; Spector, 1985), an established measure of job satisfaction.

2.2) Participants

All participants were direct care staff working with people with learning disabilities in a community setting within a given geographical area.

Only staffed residential community settings where care was provided on a relatively small scale were included. Typically these provided care for around 6 clients often in ordinary housing. However, other units were also included, with up to a maximum of 30 clients living in any one setting, provided they were situated within a community, near to other residential housing and amenities such as shops.

The direct care staff included qualified and unqualified staff, and unit managers where the management role involved some degree of direct client contact. Staff who had direct contact with clients in other roles, such as cooks, domestics, psychologists, community psychiatric nurses and day centre staff were excluded. Staff working permanent night shifts were excluded, as were all other staff with little or no opportunity for client contact.

All participants were employed by Mencap, Social Services or Health agencies. Participants were recruited by approaching the manager of each unit, visiting to explain the study, and leaving questionnaires for staff to opt-in to the study if they were willing to do so.

2.3) Measures

2.3.1) Development of Questionnaire based on Theory of Planned Behaviour

The measure was developed through an on-going process of consultation and revision with three groups of managers and staff from Mencap, Health and Social Services, as well as discussion with research supervisors, and other psychologists. In this subsection, the development of the definition of focused 1:1 work is described. The behaviour for study is specified, including the amount of behaviour chosen for investigation. The derivation of salient beliefs for indirect measures of perceived behavioural control, subjective norm and attitude is then summarised. The designs for the draft instruction sheet, information sheet and questionnaire are outlined. Finally, preliminary and secondary pilot studies are described.

2.3.1.1) Definition of 'Focused 1:1 Work'

The broad aim of the study was to consider time spent by an individual member of staff with an individual client where the primary aim of that contact was to contribute to the

developmental needs of the client. The term '1:1 time' was already recognised and used by staff in the study, and referred to all time spent by individual staff members with individual clients. Hence the term 'focused 1:1 work' was developed to reflect its status as a specific sub-category of '1:1 time'.

To provide a basis for discussion, a short draft definition with examples, was incorporated into the information sheet (appendix 1) and presented at meetings with the three groups of staff.

This generated considerable discussion, and questions about whether specific scenarios would be considered to meet the definition. In addition, it seemed that many of the staff assumed that the implicit message in the material was that other types of 1:1 time and time spent in other ways were not considered to be valuable work activities. The definition was revised to take account of these issues. Bullet points were used to highlight the key defining characteristics of focused 1:1 work. This was followed by two detailed scenarios illustrating the difference between focused 1:1 work and other sorts of 1:1 time spent with clients. A table illustrating a number of briefer examples, was retained. Finally, a number of points were included which emphasised that the aims of the study were to understand rather than to find fault, and that many other aspects of care work were considered valuable and could have been selected for study.

The full definition is presented in appendix 4. The key defining characteristics presented as bullet points are abstracted below :

Extract from Definition of 'Focused 1:1 Work'

Focused 1:1 work with clients

- Time spent by an individual staff member with an individual client.
- More than 5 minutes long.
- The primary focus of the contact is the client.
- The primary aim of the work is to offer a client activities, interactions or experiences which are intended to contribute to their developmental needs. Examples include things that are intended to be enjoyable (including leisure activities), learning new skills, or supporting the client in experiencing something new.
- The intended aims of the work are not in addition, or secondary, to some other routine/ongoing activity.
- The person you are working with needs your involvement for the work undertaken.
- There is a degree of choice involved for the staff member in allocating their time in this way.
- The work **could** be part of a care plan, if the above parts of the definition apply, and if there is still some degree of choice involved for the staff member.

Although the final definition was relatively long, staff reported that it provided a clear conceptual picture, reducing the need to ask questions about it. In order to maintain the clarity of the questionnaire, the explanation of the definition was presented separately. A brief reminder of the main defining characteristics was presented as part of the instructions for the questionnaire.

2.3.1.2) Defining the behaviour for investigation

The theory of planned behaviour stipulates that when studying a repeated behaviour, a specified amount of that behaviour needs to be chosen for investigation. All theory components are then measured in relation to the amount of the behaviour chosen for study. In addition, it is necessary to define an action, target, context and timeframe for the behaviour under consideration.

For this study the *action* was spending time in focused 1:1 work, the *target* was the clients worked with, and the *context* the residential community setting for people with

learning disabilities where the members of staff worked. During discussion with members of staff, it became apparent that time allocation decisions were often on a shift-by-shift basis, and that it was relatively easy for staff to conceptualise time allocation in terms of the number of minutes spent on a given task per shift. However, individual shifts vary considerably according to factors such as the time of day, and unpredictable events and interruptions. Accordingly, it was decided that it would be suitable to consider the *timeframe* for the behaviour in terms of *the average number of minutes per shift in the next month*.

In line with the theory of planned behaviour, a dichotomised measure of behavioural intention was chosen as one of the main outcome measures used in this study. Accordingly, the specified amount of the behaviour for consideration was selected with the aims of maximising variability on this measure, and minimising ceiling or floor effects. To achieve this, a survey of different measures of behavioural intention was conducted with 23 members of staff (appendix 2). The survey included dichotomous intention items of the form :

In the next month, on average, how likely is it that you will spend 15 minutes or more per shift on 1:1 focused work with clients ?

Very unlikely 1 2 3 4 5 6 7 Very likely

Other items assessing intention with regard to a minimum of 30, 60, 120 and 180 minutes were also included. The results of the survey are presented in Table 2.

Table 2 - Mean scores and standard deviations for survey of dichotomous intention items

Minimum average amount of time per shift in next month	Mean score on seven point scale	Standard deviation
15 minutes	5.30	1.74
30 minutes	4.46	2.08
60 minutes	3.57	1.97
120 minutes	2.48	1.78
180 minutes	1.65	0.98

Table 2 indicates that the items assessing intention in relation to the 30 and 60 minute items had the largest standard deviations, suggesting that responses to these items were the most variable. They were also nearest the mid-point of the score (a score of four on the seven point scale), which is desirable since a mean score near the mid-point would minimise any possible floor or ceiling effects. Since the 30 and 60 minute items were slightly above and below score of four respectively, the mid-point between these two amounts of time, which was 45 minutes, was selected. Hence, an average of 45 minutes or more per shift was selected as the amount of time engaged in the behaviour to be studied.

Hence, for this study the behaviour specified was a staff member *spending an average of 45 minutes or more of their time per shift in focused 1:1 work with clients in the next month* in a residential community setting for people with learning disabilities.

2.3.1.3) Behavioural intention items

Single-item measures to assess dichotomous and continuous behavioural intention were utilised in the study. The use of single item measures of intention is common in studies using the theory of planned behaviour, and they are considered to be accurate and valid measures of the construct (Ajzen, 1991; Courneya, 1994). They also have the advantage of reducing the number of items in the questionnaire, thus reducing the load on participants. Since these items are referred to extensively in later sections they are presented in full here.

Dichotomous behavioural intention measure

In the next month, on average, how likely is it that you will spend 45 minutes or more of your time per shift, on focused 1:1 work with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

Continuous behavioural intention measure

In the next month, on average, how many minutes per shift of your working time do you intend to spend on focused 1:1 work with clients ?

Answer : _____ minutes per shift

2.3.1.4) Derivation of Salient Beliefs

Initially five members of staff were interviewed to establish relevant beliefs in the areas of attitude, subjective norm and perceived behavioural control. Each interview was semi-structured and lasted for about 30 minutes.

After briefly outlining the purpose of the interview, and emphasising that information provided would be confidential, the interview was conducted according to the theory of planned behaviour guidelines (Ajzen & Fishbein, 1980). The questions asked are shown below in Table 3. Discussion was facilitated around each item, and responses recorded by hand.

Table 3 - Semi-structured interview questions to derive relevant beliefs

Question	Theory of planned behaviour component
What sorts of things might help or prevent you from spending an average of 45 minutes or more per shift of focused 1:1 time with clients in the next month ?	Perceived behavioural control
Which groups of people or individuals have an influence on whether you spend an average of 45 minutes or more per shift of focused 1:1 time with clients in the next month ?	Subjective norm
What do you see as the advantages and disadvantages, for you, of spending an average of 45 minutes or more per shift of focused 1:1 time with clients in the next month ?	Attitude towards behaviour

The most commonly mentioned beliefs in each area were taken to form a provisional shortlist for each theory component. These provided the basis for discussion with the groups of staff previously mentioned. For each group, the study was outlined, and

handouts of the questions and salient beliefs from the semi-structured interviews provided to form the basis of discussion. The groups were requested to comment on the beliefs on the handouts, and to suggest additional relevant beliefs that occurred to them. This proved to be a largely confirmatory procedure, but three additional items were suggested which were common to each group. The beliefs corresponding to each component of the theory were used as the basis of indirect measures of attitude, subjective norm and perceived behavioural control in the draft questionnaire (Tables 4-6).

Table 4 - Staff attitudes : outcome beliefs about spending time in focused 1:1 work derived from individual interviews and group discussion

Belief identified
Enhance job satisfaction of staff member
Help the clients develop skills
Emotionally taxing or draining for staff member
Less available to overall group of clients
Provide clients which chances to make choices
Staff member would not complete all jobs that they needed to before ends of shifts
Help build a good relationship between member of staff and clients
Clients would behave in a way which was stressful for staff member during 1:1 time
Help prevent difficult behaviour in general
Promote unhealthy, dependant relationships between staff member and clients

Table 5 - Subjective norm : beliefs about influential others derived from interviews and group discussion

Influential other person identified
Clients worked with
Formal supervisor
Unit or home manager
Organisation worked for
Families of clients

Table 6 - Perceived behavioural control beliefs identified from interviews and group discussion

Perceived behavioural control belief identified
Feeling in the right frame of mind
Having enough staff
Good unit morale
Supportive colleagues
Difficult or challenging behaviour from clients
Opportunities to make decisions about how to spend time
High rate of staff sickness or absence for other reasons
Lots of interruptions
Lots of other demands on time
Money available to spend on facilitating focused 1:1 work

2.3.1.5) Design and Layout of Draft Questionnaire

A draft questionnaire was designed based largely on the template provided by the theory of planned behaviour (Ajzen & Fishbein, 1980). It included three sections corresponding to the three components of the theory, a section to measure behavioural intention and past behaviour, and a section asking for demographic information.

The questionnaire was structured as illustrated below in Table 7. A short note was presented at the beginning of the questionnaire asking that the participant consider all the questions from the perspective of their spending an average of 45 minutes or more of focused 1:1 time with clients per shift in the next month. Responses to all items relating to the three components of the theory were rated on 7-point scales. During the group discussions it was apparent that many staff related most quickly to the perceived behavioural control component of the theory, and on this basis this section is presented first in the questionnaire. The behavioural intention section is presented towards the end on the basis that staff members who felt guilty or defensive about their time allocation to focused 1:1 time would have had a chance to qualify and illustrate the factors relating to this in the process of filling in the questionnaire and thus be more likely to provide accurate responses in this section. This section also included an item asking about behaviour in the past month. For similar reasons, the demographics

section was included at the end of the questionnaire, as it is suggested that participants are more inclined to provide personal data after having answered questions related to a study, rather than providing this before knowing what sorts of questions are going to be asked (Oppenheim, 1992). This section included an invitation to opt-in to the re-test phase of the study. There was also an open-ended comments section provided in the questionnaire to provide supplementary qualitative data.

Table 7 - Draft Questionnaire Structure

Section no.	Section name	Number of items
<i>1</i>	<i>Perceived behavioural control (pbc)</i>	
1.1	Global direct pbc items	4
1.2	Specific indirect pbc items	10 x 2
<i>2</i>	<i>Subjective norm</i>	
2.1	Global direct subjective norm items	3
2.2	Specific indirect subjective norm items	5 x 2
<i>3</i>	<i>Attitude</i>	
3.1	Global direct attitude items	6
3.2	Specific indirect attitude items	11 x 2
<i>4</i>	<i>Behavioural intention and past behaviour</i>	
4.1	Past behaviour	1
4.2.1	Dichotomous behavioural intention	1
4.2.2	Continuous behavioural intention	1
<i>5</i>	<i>Comments section</i>	<i>open-ended</i>
<i>6</i>	<i>Demographics</i>	<i>6</i>

2.3.1.6) Design and Layout of Draft Information Sheet

A draft information sheet was produced and included a brief rationale and summary of the aims of the study. It also explained that participation was voluntary, that responses would be kept confidential, and that no information identifying individual responses would be fed back to services. It was explained that the results of the study would be fed back to interested parties, and contact telephone numbers and addresses were provided in the case of queries. This information sheet fitted on one A4 sheet of paper.

2.3.1.7) Design and Layout of Draft Instruction Sheet

An instruction sheet was drafted to be attached to the front of the questionnaire. Participants were instructed to answer the questionnaire in relation to their current working environment, and it was emphasised that there were no right or wrong answers to questions. A statement about the repetitive nature of the questionnaire was made, and an explanation for this provided.

General instructions were outlined, similar to those suggested in the original theory (Ajzen & Fishbein, 1980), including examples of how to complete the seven point scales. Participants were directed to contact information at the end of the questionnaire in the case of difficulty. At the bottom of the sheet, the bullet point summary definition of focused 1:1 work was provided as a reminder, and participants were thanked for their contribution to the project. The instruction sheet also fitted on one A4 sheet of paper.

2.3.1.8) Preliminary Pilot Study

The aim of the preliminary pilot study was to assess the general viability of the information sheet, definition, instruction sheet and questionnaires as a complete package. Specifically, the aims were to assess readability, clarity, and face validity. In addition, it was intended to provide information about the time taken to read the information and complete the questionnaires, and provide a way to visually check for any items that appeared to have clear ceiling or floor effects.

Questionnaire packs were distributed to 11 direct care staff, 8 of whom responded. An accompanying sheet invited participants to comment on the different aspects of the study, and also enquired about the length of time taken to read the information and then complete the questionnaires.

At this stage, other clinical psychologists were also consulted and invited to comment on the materials developed.

A number of minor changes were suggested which included changes to the wording of certain items and changes in presentation to enhance clarity such as the use of highlighting and bullet points. In addition, it was commented that the definition of 1:1 focused work was clear, but long and involved. When the responses were examined, it also became apparent that the global direct measure of attitude appeared to be suffering from a marked ceiling effect. The effect was such that most participants were rating the behaviour very positively. The average length of time taken to read the information and complete the questionnaires was just over 30 minutes.

The minor changes suggested for wording and presentation were implemented. The wording was simplified slightly for the definition of focused 1:1 work, but it was felt that any attempt to radically shorten the definition would risk trading brevity for confusion, as reflected in the development of the definition. However, the feedback about the definition was used to inform the procedure for the main study. The adjectives used in the rating scales for the global direct measures of attitude were deliberately weighted in an attempt to reduce the apparent ceiling effect. For example, an item using the adjectives 'bad' and 'good' was revised so that the scale measured attitude from 'bad' to 'very good'. Finally, the information sheet was modified by including instructions about how to participate in the study, and an estimate of how long it took to do so.

The revised versions of the information sheet, definition, instruction sheet, and questionnaire, are presented in appendices three, four, five, and six respectively.

2.3.1.9) Secondary Pilot Study

The secondary pilot study was undertaken to ascertain the acceptability of the levels of internal reliability of the revised theory of planned behaviour questionnaire. This was achieved by distributing complete questionnaire packs to the first six residential settings in the main study, and analysing the responses to these before proceeding. A total of 46 questionnaire packs were distributed for the secondary pilot study, and 20 staff members returned theory of planned behaviour questionnaires, a response rate of 43 percent. The procedure was as for the main study.

Internal reliability was assessed by calculating Cronbach alpha coefficients for the theory of planned behaviour components in the questionnaire. These are presented in Table 8.

Table 8 - Cronbach alpha coefficients for components of theory of planned behaviour questionnaire

Component	Alpha value	Number of items
Direct perceived behavioural control	.60	4
Indirect perceived behavioural control	.73	10
Direct subjective norm	.68	3
Indirect subjective norm	.84	5
Direct attitude	.80	6
Indirect attitude	.81	11

The alpha values ranged between .60 and .84, with a mean of .74. The mean alpha value is greater than the suggested standard of .70 (Kline, 1993; Nunnally, 1978), and consistent with other studies using the theory of planned behaviour. The results of the secondary pilot study indicated that the theory of planned behaviour questionnaire had acceptable levels of internal reliability. On this basis no further revisions were made to the questionnaire, and the main study proceeded.

2.3.2) Measure of staff:client ratio

For each residential setting, the manager was asked to provide details of the total number of clients living there, and the number of staff working with the clients at any one time. Staff:client ratio was then calculated by dividing the number of staff by the number of residents. Calculating staff:client ratio by considering the number of staff working with the client group at any one time, rather than taking the total number of staff employed in the service, is accepted as the most valid way of measuring this variable (Mansell & Beasley, 1993).

2.3.3) Job Satisfaction Survey (JSS; Spector, 1985)

The JSS is a 36 item measure of job satisfaction and assesses nine facets of job satisfaction as well as overall satisfaction. It uses a summated rating scale format, with each facet score consisting of 4 items. Participants respond to questions by circling a number on a six point scale. It is an established measure with acceptable reliability and validity. It correlates well with other established measures of job satisfaction such as the Job Descriptive Index (JDI; Smith, Kendall & Hulin, 1969) and with other measures normally associated with job satisfaction such as the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975). Norms based on 8,113 individuals from 52 samples are available for this instrument (Spector, 1997).

The JSS was considered particularly suitable for this study since it can be completed relatively quickly and has established norms for comparative purposes. It provides a detailed profile of job satisfaction, including sub-scales measuring global and intrinsic job satisfaction. The JSS is presented in full in appendix 7.

2.4) Procedure

2.4.1) Ethical Approval

The guidelines from the local research ethics committee suggested that approval would not be required since the study was to be conducted with members of staff. However, a full ethics committee application was submitted, and sent with a covering letter explaining that it was expected that the study would not need ethical approval. The chairperson of the committee wrote back confirming that ethical approval was not needed for the study (appendix 8).

2.4.2) Main Study

The manager of each group home or community unit was contacted and a time arranged to visit. The investigator then visited each establishment, meeting the manager and any other available staff. Each meeting lasted between 60 and 90 minutes. In a number of cases it was possible to attend a staff meeting to talk to the majority of staff in the establishment. A brief talk was provided outlining the study and guiding the staff present through the different components of the questionnaire packs. Time was allowed for discussion and queries. It was acknowledged that the definition was relatively long, but had been designed to anticipate potential questions and to provide as clear a conceptual picture as possible. It was emphasised that feedback would be available to any of the participants in the study. At the end of each visit an appropriate number of questionnaires were provided and left with the staff group for an agreed duration which took account of the need to find time to fill in the questionnaires, and for all staff to have had an opportunity to do so within the constraints of shift patterns. The investigator then returned on an agreed date to collect completed questionnaires. In most cases, it was agreed that any outstanding questionnaires after this date would be returned by post.

This method of distribution was selected to maximise the response rate, and to interest and engage as many staff as possible. In addition, due to the length of the definition, it was considered valuable to have talked through this with at least a few key staff in each establishment. In many cases the unit manager agreed to co-ordinate local questionnaire distribution and to deal with simple queries about the definition which had already been covered in the initial meeting with them.

2.4.3) Test Re-test Phase

To assess test-retest reliability and the relationship between behavioural intention and self-reported behaviour, participants were asked to identify themselves if they were willing to be contacted again to fill in the theory of planned behaviour questionnaire on an additional occasion. In total, 55 participants (45%) identified themselves in this way, and were each sent an additional questionnaire one month after the date on which they had filled in the original questionnaire. A covering letter, modified instruction sheet, and stamped addressed envelope were enclosed.

3) Results

The results presented in this section are as follows :

- Response rates to the main study, and for the test-retest phase.
- Demographic details of the participants.
- Summary statistics for the dataset.
- Internal reliability of theory of planned behaviour questionnaire.
- Test-retest reliability of theory of planned behaviour questionnaire.
- Analyses relating to the hypotheses.
- Additional analyses.
- Qualitative data.

3.1) Response Rates

3.1.1) Main study response rate

In total, 260 questionnaire packs were distributed, and 121 members of staff returned completed questionnaires, indicating a response rate of 46 percent. This figure includes the questionnaires distributed and returned for the secondary pilot study. In comparison with postal surveys, where response rates are typically around 30 percent (Goyder, 1985), this is a good response rate.

3.1.2) Theory of planned behaviour questionnaire test-retest response rate

Of the 55 participants who indicated they would be willing to fill in the questionnaire on a further occasion, 30 returned retest questionnaires, indicating a response rate of 55 percent. This was an improved response rate in comparison to the main study, and a good response rate for the purposes of considering test-retest reliability.

3.2) Demographic Data

Demographic data is presented for the 115 participants who returned useable theory of planned behaviour questionnaires.

Of the 115 participants, 82 participants were female (71.3 %), and 29 were male (25.2 %). Four participants did not indicate their gender on the questionnaire.

The mean age of participants was 37.86 years (SD=11.12, range 20-61 years). Thirty-four participants (29.6 %), held some form of professional qualification, 76 (66.1%) were unqualified, and 5 (4.3%) did not provide this information. Of the qualified participants, 30 indicated how long they had been qualified for. The mean length of time since qualification was 6.72 years (SD=5.48, range 0.5-20 years).

In the whole sample, the mean length of experience of working with people with learning disabilities was 6.95 years (SD=4.93, range 0.5-24 years). In terms of employing agency, 50 participants worked for Mencap (43.5 %), 26 for Social Services (22.6%) and 39 for Health (33.9%).

3.3) Summary Statistics for Dataset

3.3.1) Theory of planned behaviour questionnaire

Of the 121 responses, 6 were excluded from analyses due to missing data. The remaining 115 questionnaires were complete with the exception of 13 cases, where responses to the past behaviour, and continuous behavioural intention items were omitted. In these cases, data presented relates to the 102 cases where a response to these items was provided.

Summary statistics for questionnaire component scores are provided in Table 9. In each case, scores were transposed so that a larger score represents a higher level of the concept measured. For example, a higher score on global direct attitude represents a

more positive attitude towards the behaviour. For theory of planned behaviour components of perceived behavioural control, subjective norm and attitude, scores for direct measures were obtained by simply summing individual item scores. Scores for indirect measures were obtained by summing the products of items measuring probability of occurrence and strength for each salient belief. These scoring procedures are as recommended by the theory of planned behaviour. Scores for past behaviour, intention, clients in unit, and staff on shift are single item measures, transposed where appropriate. Staff:client ratio scores were calculated by dividing the staff on shift score by the clients in unit score.

Table 9 - Summary Statistics for Theory of Planned Behaviour Questionnaire

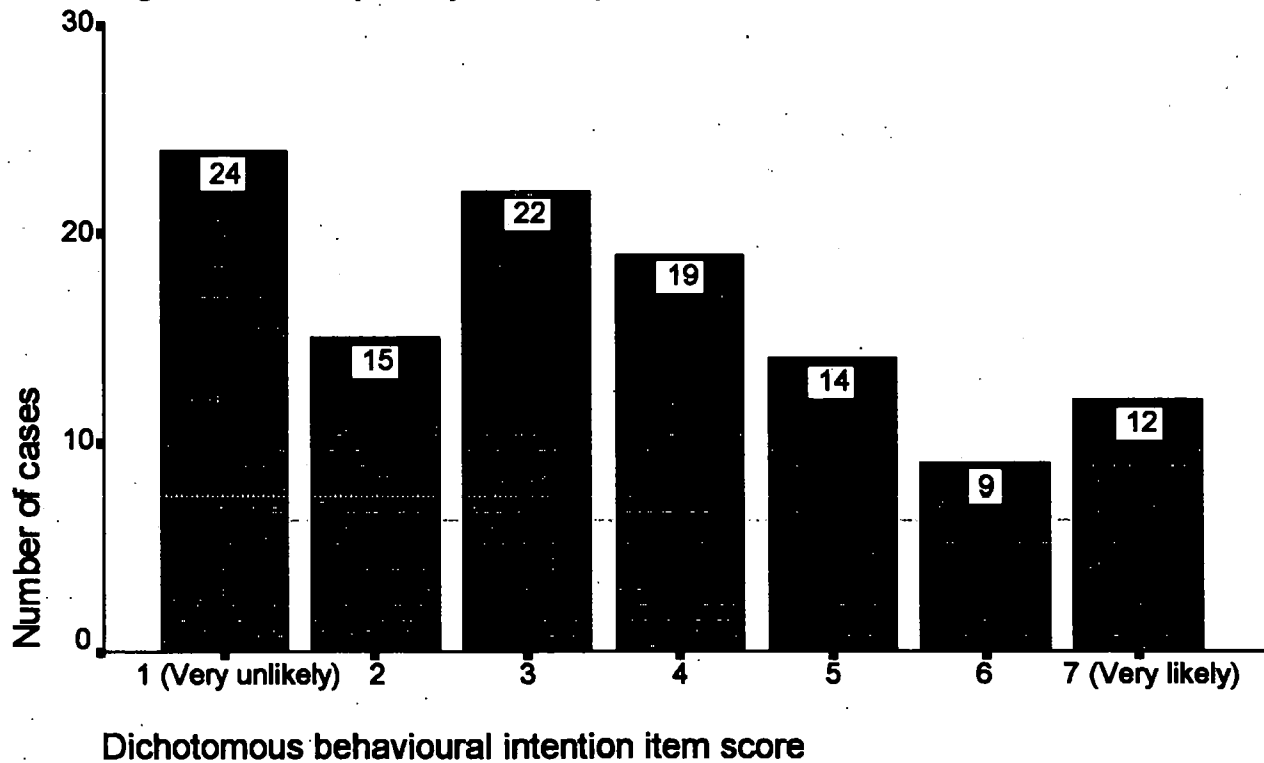
Variable	Mean	SD	Range	Possible Range
Global direct control	16.57	5.88	4-27	4-28
Specific indirect control	200.09	43.04	67-325	10-490
Global direct subjective norm	12.3	3.42	3-21	3-21
Specific indirect subjective norm	135.00	47.14	41-245	5-245
Global direct attitude	36.45	5.46	11-42	6-42
Specific indirect attitude	256.56	54.81	83-353	11-539
Number of clients in unit	7.71	5.56	3-22	
Number of staff per shift	2.59	0.80	1-8	
Staff:client ratio	0.45	0.23	0.14-2	
Average minutes per shift of 1:1 work in past month (past behaviour)	33.03	37.68	0-240	
Probability of spending average of 45 minutes per shift in next month (dichotomous intention)	3.51	1.94	1-7	1-7
Intended average number of minutes per shift in next month (continuous intention)	38.2	39.05	0-240	

The descriptive statistics indicate that for the theory of planned behaviour components of perceived control, subjective norm, attitude, past behaviour and behavioural intention, scores on nearly all scales appeared reasonably variable, with an acceptable range of values when compared to the possible range. The only exception to this was the global direct attitude variable, which appears relatively skewed to the upper end of

the range of possible values, suggesting a possible ceiling effect. The values for number of clients in unit, staff on shift and staff:client ratio showed relatively little variation. For this sample it appears that the mean ratio is of just under one staff member for every two clients, with little variation around this figure.

Given that the two behavioural intention items feature as outcome measures in a number of the subsequent analyses, they are considered in more detail. The dichotomous behavioural intention item asked participants to rate the probability of their spending an average of 45 minutes or more of time per shift in focused 1:1 work over the next month. Responses are on a seven point scale, ranging from one to seven, with a transposed score of one indicating this as very unlikely and a transposed score of seven as very likely. The responses to this item are represented graphically in Figure 2.

Figure 2 - Frequency of Responses to Dichotomous Intention Item



Overall, 35 participants (30%) indicated that they were likely to spend an average of 45 minutes or more of time in focused 1:1 work per shift and 61 participants (53%)

indicated that they were unlikely to do this. The 19 remaining participants (17%) gave a score of four, indicating neutrality as regards their intentions.

The continuous behavioural item asked participants to indicate how many minutes they intended to spend, on average, per shift, in focused 1:1 work over the next month. The distribution of scores on this item are represented by a histogram in Figure 3.

Figure 3 - Histogram for Continuous Intention Item

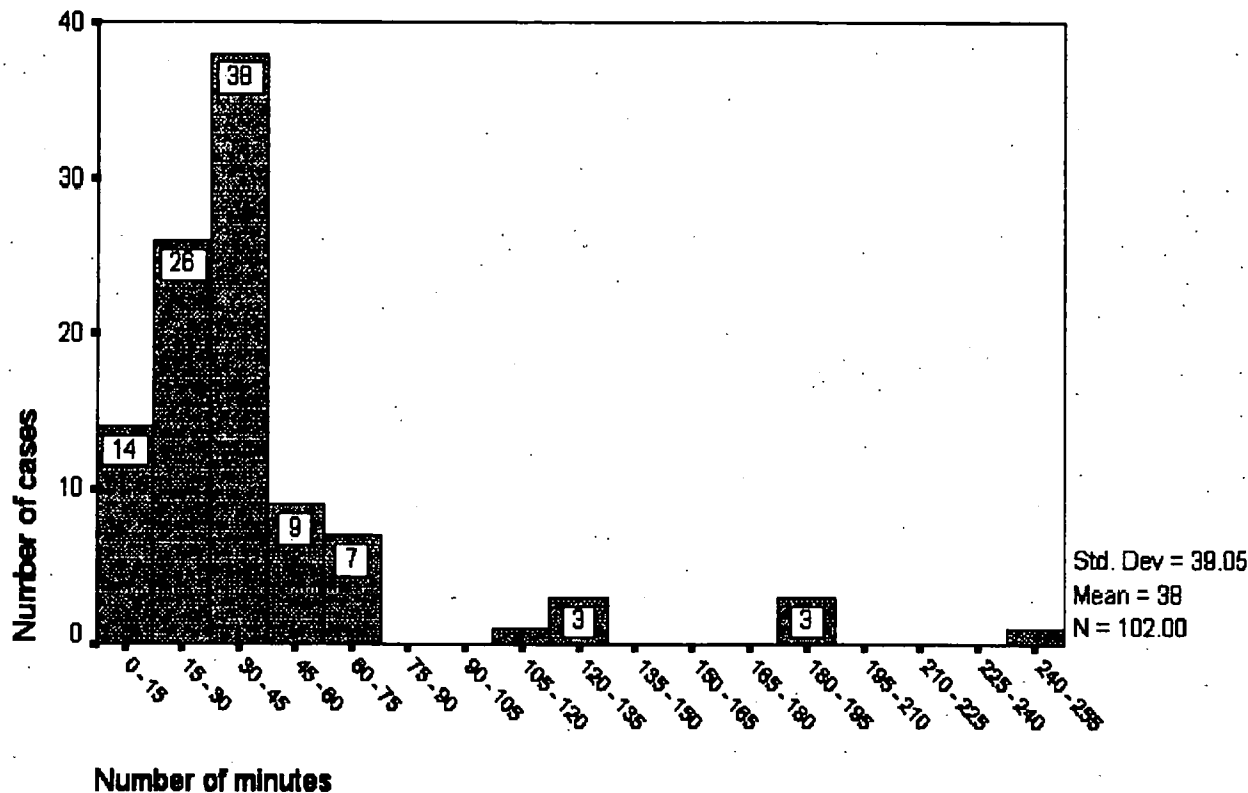


Figure 3 indicates that 94 of the responses were below 75 minutes, with just 8 participants responding with a value above this figure. Indeed, the majority of values were in the range between zero and 45 minutes, with 78 participants responding in this range. Hence, the majority of participants indicated that they intended to spend an average of 45 minutes or less of focused 1:1 time with clients per shift in the next month.

3.3.2) Job Satisfaction Survey

Of the 121 participants, 9 JSS questionnaires were excluded due to missing data. Descriptive statistics for the remaining 112 participants who completed this measure are provided in Table 10.

Table 10 - Summary Statistics for Job Satisfaction Survey

Scale	Mean	Reported norm means for measure	Standard deviation	Reported norm standard deviation for measure
Pay	13.61	11.8	4.54	2.6
Promotion	12.88	12.0	4.98	1.9
Supervision	19.71	19.2	4.17	1.5
Benefits	14.00	14.2	3.79	2.2
Contingent rewards	13.83	13.7	4.54	2.0
Operating procedures	12.92	13.5	3.94	2.2
Co-workers	17.76	18.3	4.07	1.1
Nature of work (Intrinsic)	20.28	19.2	3.3	1.3
Communication	14.26	14.4	4.14	1.8
Total (Global)	139.25	136.5	24.01	12.1

Note : Source for reported norms - Spector (1997).

Table 3 indicates that scores for the mean global job satisfaction scale, and the mean individual sub-scale scores are broadly comparable with the published norms for the measure. However, for every scale, the standard deviations for this sample are larger than the normative standard deviations by a factor of around two. This indicates that although mean scores for job satisfaction in this sample are comparable to published norms, the variability in the sample is notably greater.

3.4) Analyses Relating to Psychometric Properties of Theory of Planned Behaviour Questionnaire

3.4.1) Internal reliability of theory of planned behaviour questionnaire

Cronbach alpha coefficients were calculated for the theory of planned behaviour questionnaires returned. For the 115 useable theory of planned behaviour

questionnaires, the mean Cronbach alpha value was .71. Alpha values for the different components of the questionnaire are presented in Table 11.

Table 11 - Cronbach alpha coefficients for components of theory of planned behaviour questionnaire

Component	Alpha value	Number of items
Direct perceived behavioural control	0.85	4
Indirect perceived behavioural control	0.56	10
Direct subjective norm	0.44	3
Indirect subjective norm	0.83	5
Direct attitude	0.83	6
Indirect attitude	0.71	11

The alpha values range between .44 and .85. The indirect perceived behavioural control and direct subjective norm scales are both below the widely accepted standard of .70 (Kline, 1993; Nunnally, 1978). All other components have alphas above this figure.

Overall, the questionnaire can be considered to have satisfactory internal reliability. However, the indirect perceived behavioural control and direct subjective norm scales are less internally consistent than is desirable, suggesting that the items in these scales can only be considered to be measuring the same construct to a modest degree.

3.4.2) Test-Retest reliability of theory of planned behaviour questionnaire

The test-retest questionnaire was completed and returned by 30 participants. The time elapsed between the original time of completion and the second time of completion was about a month. To compare the mean scores over time, Wilcoxon two-related samples t-tests were employed on each individual questionnaire item.

From the 74 pairs of questionnaire items compared, two item means were significantly different. These two items are presented in table 12.

Table 12 - Items with significantly different means on test retest analyses

Item	Significance value
Harmful vs very beneficial (direct attitude)	0.019
Intended minutes per shift in next month (continuous intention)	0.021

However, both items are significantly correlated over time. The direct attitude item has a significant test-retest correlation of .53 (Kendall's Tau r , $p < 0.01$) and the continuous behavioural intention item a test-retest correlation of .90 (Pearson's r , $p < 0.01$). It should be noted that of 72 pairs compared, three pairs would be expected to be found to be significantly different due to chance, which appears to be a reasonable explanation for the result here.

In addition, correlation coefficients were calculated for the total scores for each questionnaire component, which are all presented in Table 13.

Table 13 - Correlation coefficients for total scores for each questionnaire component

Component	Correlation coefficient
Direct perceived behavioural control	0.77 ^{***}
Indirect perceived behavioural control	0.83 ^{***}
Direct social norm	0.49 ^{**}
Indirect social norm	0.65 ^{**}
Direct attitude	0.68 ^{***}
Indirect attitude	0.67 ^{**}
Dichotomous behavioural intention item	0.72 ^{***}
Continuous behavioural intention item	0.90 ^{***}

^{**} $p < .01$; ^{***} $p < .001$

All correlations are statistically significant, with values ranging from .49 to .90, with a mean of .71. Overall, the questionnaire had satisfactory test-retest reliability at an interval of one month.

3.5) Analyses Relating to Hypotheses

3.5.1) Hypotheses 1-4 : Predicting dichotomous intention from theory of planned behaviour components

Analyses relating to hypotheses one to four are presented together. A stepwise multiple regression was employed to consider the relative predictive power of the theory of planned behaviour components and staff:client ratio.

H1 : There will be a positive association between attitude and behavioural intention.

H2 : There will be a positive association between subjective norm and behavioural intention.

H3 : There will be a positive association between perceived behavioural control and behavioural intention.

H4 : There will be a positive association between staff:client ratio and behavioural intention.

One stepwise multiple regression was used to examine the factors in the theory of planned behaviour which might account for a proportion of the variance in the dichotomous behavioural intention measure. This intention measure was adopted as the dependant variable for this stage of the analysis, as it is the type of outcome measure recommended by the theory when considering repeated behaviours. In addition, a correlation table is presented to provide supplementary information. Independent variables made available for selection for the regression model were direct and indirect measures of perceived control, subjective norm and attitude, and staff:client ratio.

In the regression model, only direct perceived behavioural control emerged as a significant predictor ($F(1,113)=60.78, p<.001$). This item predicted 35 percent of the variance in outcome ($\beta=.59, t=7.80, p<.001$). A single-sample Kolmogorov-Smirnov test indicated that the distribution of the residuals did not differ significantly from the normal distribution ($Z=0.87, p>.05$). The inter-correlations between the variables made available for selection are presented in Table 14.

Table 14 - Inter-correlations between theory of planned behaviour questionnaire components

	1	2	3	4	5	6	7	8
Direct perceived behavioural control	1	.58***	.01	.05	.05	.06	.18	.59***
Indirect perceived behavioural control	2	1	.19	.27**	.23*	.22*	.19*	.40***
Direct subjective norm	3		1	.49***	.03	.16	-.11	-.00
Indirect subjective norm	4			1	.29**	.35***	-.01	.06
Direct attitude	5				1	.47***	.02	.15
Indirect attitude	6					1	-.16	.09
Staff:client ratio	7						1	.10
Dichotomous intention item	8							1

Statistically significant values shown in bold

*p<.05; **p<.01; ***p<.001

Table 14 indicates that, in addition to the association between direct perceived behavioural control and dichotomous intention, there was a statistically significant correlation between indirect perceived behavioural control and dichotomous intention. This variable was not selected for entry in the regression model which indicates that when combined with direct perceived behavioural control, it did not predict any additional variance in outcome. Therefore, for the purposes of predicting dichotomous intention, indirect perceived behavioural control did not offer any additional predictive power in addition to direct perceived behavioural control.

It should also be noted that the direct and indirect measures of perceived behavioural control, subjective norm, and attitude were significantly correlated with each other. Since the theory of planned behaviour stipulates that indirect belief based measures are considered antecedents of the direct measures, these findings are consistent with the theory, and the magnitude of the correlations similar to findings reported in other studies (Ajzen, 1991).

These results support hypothesis one, in that direct and indirect perceived behavioural control are significantly positively associated with the likelihood of participants spending an average of 45 minutes or more of their time per shift in focused 1:1 work

with clients in the next month (dichotomous behavioural intention). In the regression analysis it was found that direct perceived behavioural control was the most predictive factor, accounting for 35 percent of the variance in dichotomous behavioural intention scores.

Hypotheses two, three and four are not supported by these results. Neither staff:client ratio, nor direct or indirect measures of attitude or subjective norm were significantly positively related to dichotomous behavioural intention.

3.5.2) Hypotheses 5-7 : Predicting self-report measure of behaviour

Analyses relating to hypotheses five, six and seven will be presented together. In the main study, participants were asked to predict their future behaviour over the next month. The participants in the re-test phase of the study were sent a second questionnaire one month later. The item assessing past behaviour during the last month at re-test is thus used as a self-report measure of actual behaviour, and serves as the dependant variable in this section. It should be noted that the sample size for analyses in this section is restricted to the 30 participants who returned re-test questionnaires.

H5 : There will be a positive association between behavioural intention and actual behaviour.

H6 : There will be a positive association between perceived behavioural control and actual behaviour.

H7 : There will be a positive relationship between staff:client ratio and actual behaviour.

The relative predictive power of direct perceived control, dichotomous behavioural intention, and staff:client ratio in relation to self-reported behaviour was considered by using a stepwise multiple regression analysis. Supplementary information is provided by considering inter-correlations between these items.

In the regression analysis only dichotomous behavioural intention emerged as a significant predictor ($F(1,28)=26.96$, $p<.001$). This item explained 33 percent of the variance in self-reported behaviour ($\beta=.57$, $t=3.03$, $p<0.01$). A single-sample Kolmogorov-Smirnov test indicated that the distribution of the residuals did not differ significantly from the normal distribution ($Z=0.61$, $p>.05$). The inter-correlations between the variables made available for selection are presented in Table 15.

Table 15 - Inter-correlations between perceived control, dichotomous intention, staff:client ratio and actual behaviour for re-test sample (n=30)

		1	2	3	4
Direct perceived behavioural control	1	1	.69**	.16	.44*
Dichotomous intention	2		1	.07	.57**
Staff:client ratio	3			1	.03
Actual behaviour	4				1

Statistically significant values shown in bold

* $p<.05$; ** $p<.01$

Table 15 indicates a statistically significant positive correlation between dichotomous behavioural intention and actual behaviour, and a smaller, but significant positive correlation between direct perceived behavioural control and actual behaviour. There is no significant association between staff:client ratio and actual behaviour.

These results support hypotheses five and six, in that there were significant positive associations between the self-report measure of actual behaviour, and both dichotomous behavioural intention and direct perceived behavioural control. The regression analysis indicates that direct perceived behavioural control does not have any predictive value not accounted for by dichotomous behavioural intention.

The results do not support hypothesis seven, in that no significant positive association was found between staff:client ratio and actual behaviour.

3.5.3) Hypotheses 8-10 : Predicting job satisfaction

Hypotheses eight to ten are considered together. Two multiple regression analyses were carried out to assess the predictive value of perceived behavioural control, dichotomous and continuous behavioural intention, and past behaviour as regards global and intrinsic job satisfaction.

H8 : There will be a positive relationship between past behaviour and job satisfaction.

H9 : There will be a positive relationship between behavioural intention and job satisfaction.

H10 : There will be a positive relationship between perceived behavioural control and job satisfaction.

For the 99 cases with valid theory of planned behaviour questionnaire responses and valid JSS responses, two stepwise multiple regression analyses were carried out. The first of these considered the overall job satisfaction score as the dependant variable, and the second took intrinsic job satisfaction as the dependant variable. The independent variables entered included perceived behavioural control, both behavioural intention measures and self-reported behaviour over the past month.

For global job satisfaction, only direct perceived behavioural control emerged as a significant predictor ($F(1,97)=8.86, p<.01$). This variable accounted for 8.4 percent of the variance ($\beta=.29, t=2.98, p<.01$). A single-sample Kolmogorov-Smirnov test demonstrated that the distribution of the residuals did not differ significantly from the normal distribution ($Z=0.57, p>.05$), supporting the assumptions on which the model is based.

The analysis for the intrinsic job satisfaction scale is summarised in Table 16.

Table 16 - Regression Analysis for Intrinsic Job Satisfaction

Independent variables selected for model	R Square	beta	t	d.f.	F
Continuous behavioural intention item	.10	.25	2.53*	2,96	8.81***
Direct perceived behavioural control	.16	.24	2.43*		

*p<.05; ***p<.001

For intrinsic job satisfaction, the most predictive factor was the average number of minutes the participant intended to spend in focused 1:1 work with clients per shift in the next month (continuous behavioural intention item). This factor accounted for 10 percent of the variance. When direct perceived behavioural control is added to the model, a further six percent of the variance can be predicted, such that these two variables together predict 16 percent of the variance.

The correlations between the variables made available for entry into the regression model and both measures of job satisfaction are presented below in table 17.

Table 17 - Inter-correlations between theory of planned behaviour components, past behaviour and job satisfaction scales

	Total job satisfaction scale	Intrinsic job satisfaction scale
Direct perceived behavioural control	.29**	.32**
Indirect perceived behavioural control	.16	.31**
Behaviour in last month	.20*	.30**
Dichotomous behavioural intention item	.27**	.30**
Continuous behavioural intention item	.15	.32**

Statistically significant values shown in bold

*p<0.05; **p<0.01; ***p<0.001

Table 17 indicates that both past behaviour and dichotomous intention were significantly positively associated with global job satisfaction as was direct perceived behavioural control. However, the absence of past behaviour and dichotomous intention from the regression model suggests that they do not offer any additional

explanatory power over direct perceived control as regards variance in global job satisfaction.

For intrinsic job satisfaction, Table 17 indicates that all measures considered were significantly positively associated with intrinsic job satisfaction, although there was again some co-variance amongst measures, as not all were selected for entry into the regression model.

Overall, hypotheses eight, nine and ten were all supported in relation to global and intrinsic job satisfaction. Past behaviour, direct perceived control and dichotomous intention were positively associated with global job satisfaction. Past behaviour and all measures of intention and perceived control were positively associated with intrinsic job satisfaction.

3.5.4) Hypothesis 11 : Comparative prediction of continuous and dichotomous intention from theory of planned behaviour components

This hypothesis was considered by conducting a stepwise multiple regression to consider the predictive value of the theory of planned behaviour components in accounting for the variance in the average number of minutes participants intended to spend in focused 1:1 work with clients per shift over the next month (continuous behavioural intention). The results of this analysis are then compared to earlier results from section 3.5.1.

H11 : That theory of planned behaviour components will predict more of the variance of a dichotomous-graded measure of intention when compared with a continuous-open measure of behavioural intention.

The variables available for entry into the regression model were direct and indirect perceived control, subjective norm and attitude.

An initial stepwise regression analysis indicated that direct perceived behavioural control predicted nine percent of the variance in outcome ($F(1,100)=10.03$, $p<.01$; $\beta=.30$, $t=3.167$, $p<.01$). However, the Kolmogorov-Smirnov test indicated that the distribution of the residuals *did* differ significantly from the normal distribution ($Z=2.36$, $p < 0.001$), violating one of the statistical assumptions on which the test is based. Graphical examination of the data (see Figure 3), suggested that the distribution was being affected by outliers. Cases with responses in excess of 90 minutes were excluded, and the analysis repeated ($n=94$). For this sample, direct perceived behavioural control predicted 16 percent of the variance ($F(1,92)=17.66$, $p<.001$; $\beta=.40$, $t=4.20$, $p<.001$). A Kolmogorov-Smirnov test indicated that the residuals for this regression did not differ significantly from the normal distribution ($Z=1.10$, $p>.05$).

Hence, when outliers are excluded the theory of planned behaviour components predicted 16 percent of the variability in the average number of minutes participants intended to spend in focused 1:1 work with clients per shift over the next month (continuous behavioural intention).

Hypothesis 11 was thus supported by the results, since that theory of planned behaviour components predicted 35 percent of the variance in the dichotomous intention item, which was greater than the 16 percent of variance accounted for in the continuous intention item, even after outliers were excluded.

3.5.5) Hypothesis 12 : Comparative prediction of self-reported behaviour from dichotomous and continuous intention measures

H12 : That a continuous-open measure of intention will predict more of the variance in actual behaviour when compared with a dichotomous-graded measure.

This hypothesis was considered by comparing correlation coefficients between behaviour and dichotomous and continuous intention measures. These are presented in table 18. Again, it should be noted that these analyses only reflect the responses of the

30 participants in the retest stage of the study, as this was when actual behaviour was assessed.

Table 18 - Inter-correlations between dichotomous intention, continuous intention and self-rated behaviour

		1	2	3
Dichotomous intention	1	1	.55*	.57**
Continuous intention	2		1	.77***
Behaviour	3			1

Statistically significant values shown in bold

*p<0.05; **p<0.01; ***p<0.001

Table 18 indicates that both intention items were significantly correlated with self-reported behaviour, but continuous intention was more strongly related to behaviour than dichotomous intention.

The results thus support hypothesis 12 in that continuous intention was more strongly related to self-reported behaviour, assessed at retest, than dichotomous intention.

3.6) Supplementary analyses

Given the predictive power of the perceived control variable, and the relatively low Cronbach alpha score for the indirect perceived behavioural control scale, indicating only modest inter-item correlations, additional analyses were conducted to consider the relationships between the individual items on the indirect perceived behavioural control scale, and both measures of job satisfaction and intention. These relationships were explored by calculating correlation coefficients, which are presented in Table 19.

Table 19 - Correlation coefficients between individual indirect perceived control items and intention and job satisfaction variables

	Dichotomous behavioural intention	Continuous behavioural intention	Global job satisfaction	Intrinsic job satisfaction
Feel in the right frame of mind	.23*	.20*	.00	.20*
Enough staff	.45***	.12	.11	.11
Good unit morale	.38***	.25*	.30**	.41***
Supportive colleagues	.34***	.20*	.20*	.42***
Difficult or challenging behaviour	-.05	.03	.05	-.07
Opportunities to make decisions about spending time	.02	.16	-.02	-.05
Staff sickness or absence	-.01	-.09	-.05	-.08
Lots of interruptions	-.02	-.19	.11	.07
Other demands on time	.07	-.07	.16	.08
Money available	.13	.00	-.12	.12

Statistically significant values shown in bold

*p<.05; **p<.01; ***p<.001

Table 19 indicates that the first four items of the indirect perceived control are predictive of both measures of behavioural intention, although the item relating to having enough staff is not significantly correlated with continuous behavioural intention. This indicates that the predictive value of this scale with relation to behavioural intention can be considered to be restricted to these four items only.

In addition, items relating to unit morale and having supportive colleagues are significantly correlated with both intrinsic and global job satisfaction. Also, the item relating to feeling in the right frame of mind is significantly correlated with intrinsic job satisfaction only.

3.7) Additional Factors

Analyses were carried out to investigate the possible contribution of other factors to both behavioural intention items. All tests used were non-parametric, as Kolmogorov-Smirnov tests indicated that neither intention item could be considered normally

distributed (dichotomous intention, $Z=1.45$, $p<.05$; continuous intention, $Z=2.92$, $p<.001$).

Mann-Whitney tests indicated that for both intention items, there were no statistically significant differences between male and female staff ($U=1114.0$, $p>.05$), or between qualified and unqualified staff ($U=1140.5$, $p>.05$).

There were also no significant correlations between the ages of participants, or their length of experience and the behavioural intention items.

3.8) Qualitative Data

Of 121 participants, 44 made comments in the appropriate section of the questionnaire. Through the process of reading through the comments, categories were developed for the purposes of summary. For each category, the number of comments, a brief description of the category and an example comment are provided below. The examples are quoted exactly as originally written on the questionnaires.

Control - Staff (8 comments)

This category included all comments indicating that there were too few staff to enable a desired amount of 1:1 work to take place.

"Because of the very low staff ratio in our unit it is impossible to spend the time I would like to spend on 1:1 work with each client."

Control - Clients (6 comments)

This category contains all the comments reflecting constraints that are related in some way to characteristics of the clients worked with. Examples included the high dependency needs of the client group, and clients who were occupied by scheduled activities a lot of the time.

"I work with adults with autism - therefore it is difficult to work 1:1 as they would not appreciate all the attention on them."

Control - General (6 comments)

These six comments were all stating the difficulty in spending time in this way without going into detail about what specific factors were preventing them from doing so.

"I would like the opportunity to focus on 1:1 work with my clients on a regular basis. At the moment this is almost impossible."

Control - Other duties (5 comments)

This category was for comments that reference the lack of perceived control due to demands of other duties.

"Too many demands involving household cleaning, catering, gardening etc prevent more focused 1:1 work."

Control - Work Role (2 comments)

This category was for comments from staff members who felt that their work role constrained the amount of time they could spend in focused 1:1 work.

"As the unit manager my job description and the ways I manage my time obviously reflect the likelihood and desirability of spending 1:1 time with clients. Whilst I value this activity on a personal level and promote it within the home on a professional level, my role is often to facilitate rather than participate, though not always."

Description of time constraints (7 comments)

Comments in this category were simply descriptions of the participant's working conditions, without an indication of how this affected their allocation of time.

"While other service users are at day centres, we have time to spend with one service user, 2 days out of 5"

Motivation for change (3 comments)

These participants' comments suggested that the process of completing the questionnaire had motivated them to attempt to increase the amount of time they allocate to focused 1:1 work.

"I want to make an effort to give at least 30mins 1:1 per shift. If I'm more aware of that fact then maybe I can do it - however, what I want to do and what I have/can do are two very different things."

Comments on questionnaire (6 comments)

These were simply comments on the questionnaire. Responses included comments about finding it difficult to estimate an average time per shift, and one comment about finding it difficult to apply the definition to their client group.

4) Discussion

In this section, a brief summary of the research findings is presented. Methodological issues are considered, and the results then interpreted in relation to the original research questions and hypotheses. The clinical and service implications of the study are examined, and ideas for future research suggested. Finally, the main conclusions of the study are summarised.

4.1) Summary of Findings

4.1.1) Psychometric properties of theory of planned behaviour questionnaire

The internal reliability of the questionnaire was satisfactory overall. Although two scales (indirect perceived behavioural control and direct subjective norm) had rather less internal reliability than others, they still fell within the range of scores reported in other studies (e.g. Parker, Manstead & Stradling, 1995).

The questionnaire had acceptable test-retest reliability. Wilcoxon two related-samples t-tests indicated that the individual item means did not differ significantly over time, and significant correlations over time were found for the scale scores. Most other studies have not assessed test-retest reliability, but these results are consistent with the findings reported by Whitehead (1997).

Direct and indirect measures for each questionnaire component were all significantly correlated. They were also correlated more strongly with each other than with other components of the questionnaire. These results are consistent with findings reported by Ajzen (1991), who suggests that they support the construct validity of the questionnaire.

4.1.2) Findings relating to hypotheses

In the regression analyses, direct perceived behavioural control emerged as the only significant predictor of behavioural intention, accounting for 35 percent and 16 percent of the variance in dichotomous and continuous intention respectively. Indirect perceived behavioural control was also significantly correlated with both intention measures and with direct perceived behavioural control, but did not have any additional predictive power in the regression model. Attitude, subjective norm and staff:client ratio were not associated with either intention measure. Considering the first behavioural intention item as the primary outcome measure, the theory of planned behaviour accounted for just over a third of the variance. In a review of 19 studies, Ajzen (1991) reported that the variance accounted for in different studies ranged between 18 and 88 percent. This places the results of this study in the low-middle range in comparison to other existing studies, and suggests that the theory was reasonably useful in investigating this issue.

Direct perceived behavioural control and both measures of behavioural intention were significantly associated with self-reported behaviour. The strongest association was between continuous intention and self-reported behaviour. The regression analysis indicated that direct perceived behavioural control did not have any predictive value for behaviour that was not mediated by behavioural intention. Staff:client ratio was not significantly associated with behaviour. These results support the predictive validity of behavioural intention in relation to actual behaviour. However, this is limited by the fact that the measure relies on self-report, which will be discussed later.

In relation to overall job satisfaction, direct perceived behavioural control again emerged as the only significant predictor in a regression analysis and accounted for just over eight percent of the variance. Past behaviour, and dichotomous behavioural intention were also correlated with global job satisfaction. An additional regression

analysis was employed to consider intrinsic job satisfaction. Continuous behavioural intention accounted for ten percent of the variance, and direct perceived behavioural control accounted for an additional six percent. The regression model was thus able to explain 16 percent of the variance in intrinsic job satisfaction. Other variables were significantly associated with intrinsic satisfaction, but not included in the regression model because of their co-linearity with the predictor variables. Indirect perceived behavioural control, past behaviour and dichotomous behavioural intention were all also significantly correlated with intrinsic job satisfaction. These results supported the hypotheses concerning job satisfaction. The results are consistent with other studies which have reported a association between perceived control and job satisfaction (e.g. Spector, 1986) and studies linking satisfaction in care work with client-related aspects of the job (e.g. Penna *et al.*, 1995).

The hypotheses relating to the application of the theory of planned behaviour to a repeated behaviour were supported. Theory of planned behaviour components predicted more of the variance in a dichotomous measure of behavioural intention in comparison to a continuous measure of intention, as hypothesised by the proponents of the theory of planned behaviour (Fishbein, 1991). Self-reported behaviour was predicted most effectively by a continuous measure of behavioural intention in comparison with a dichotomous measure, which is consistent with the findings of Courneya (1994).

Attitude, subjective norm, gender, age, being qualified or unqualified, and length of working experience with people with learning disabilities were not found to relate to either measure of behavioural intention.

4.2) Methodological Issues

4.2.1) The sample

The response rate for the study was 46 percent. This was higher than the typical response rate to many postal questionnaire surveys (Goyder, 1985). However, the procedure for the study was not strictly postal, since questionnaires were delivered and collected by the investigator. In this study, this method of data collection led to an improved response rate in comparison to postal surveys. Despite this, just over half of the total possible population did not participate in the study. Those who did participate may be in some way unrepresentative of the total possible population, as participants were self-selecting. It is possible that those who did not participate spend less time in focused 1:1 work with clients, and considered the study to be of less relevance to them.

In terms of demographics, the sample appeared reasonably representative. The greater proportion of female and unqualified staff in the sample reflect the fact that they are over-represented in the population for this occupational group. There was a wide range of ages of participants, and lengths of experience in working with people with learning disabilities. This suggests the sample was also reasonably representative with respect to these two variables.

The participants all worked within a given geographical area, and were employed by one of three agencies. It may therefore be necessary to exercise caution in generalising findings to learning disability direct care staff as a total population. The results of the study may in some way reflect issues relevant specifically to the locality or to the three organisations studied.

4.2.2) Application of the theory of planned behaviour

4.2.2.1) Measurement of behaviour

The measure of behaviour used for the study was a single-item self-report measure, which was used to validate behavioural intention as the primary outcome variable. Direct observation of behaviour did not take place. Self-report measures of behaviour may be unreliable, and not correlate well with actual behaviour due to measurement errors induced by inaccuracies in estimation, or bias due to social desirability.

Direct observation of behaviour was considered for the study. However, to gain a valid measure of behaviour, long observation periods over a number of different shifts would have been required to yield meaningful data. The nature of the behaviour studied was such that strategies such as time-sampling, employed by the studies of interaction, would not have been readily applicable in this study. In addition, when the possibility of conducting observations was discussed with members of staff, ethical objections were raised about the presence of an unfamiliar observer in the homes of the clients of the services.

Despite these limitations, other studies using the theory of planned behaviour have found that behavioural intention is a good predictor of actual behaviour. Also, many other studies have frequently not included any measure of behaviour, and when such measures are included they often rely on self-report (Ajzen, 1991).

4.2.2.2) Context and the principle of compatibility

The theory of planned behaviour stipulates that its predictive value is maximised when a behaviour is defined according to action, target, context and timeframe. In this study, the context for the behaviour was the work setting of a residential community service for people with learning disabilities. However, it is possible that the differences between the individual settings in the study may have been considerable, such that they

could not really be considered to be the same context. It may have been more accurate to technically consider them to be different contexts, with some shared similarities. If this were the case, the predictive power of the study could have been improved by more specific inclusion criteria for the individual community settings. The results of the study may only reflect commonalities across settings, and may not reflect factors unique to individual services or clusters of services.

4.2.2.3) *Social desirability*

It is possible that participants responses were biased towards providing responses that they considered to be socially desirable. For example, the scores on direct attitude towards the behaviour may have been influenced by the perception that it is socially desirable to value spending time in focused 1:1 work with clients. Although this may be the case, attempts were made to minimise this effect. They included emphasising the value of other forms of client contact, and other aspects of the participants' working time. In addition, the questionnaires were confidential and anonymous, which should have minimised expectations of evaluation. With the exception of the direct attitude measure, there was a reasonable level of variation in responses, with no obvious floor or ceiling effects. This mitigates against the idea that responses were influenced by social desirability, since one would expect responses to be clustered around the most desirable scores on the measures.

4.2.3) Design and analyses

The design for the main study was cross-sectional, although the relationship between intention and self-reported behaviour were considered over two time points for the re-test sample. There is thus a need for caution in considering causality, as the main body of the data provide a snapshot of an evolving process. This is, perhaps, of particular importance in considering job satisfaction, which has been conceptualised both as a

cause and consequence of behaviour at work. Relationships may therefore be bi-directional.

A general issue in the analyses is the treatment of ordinal level data as though it were interval level data. Strictly speaking, procedures such as multiple regression analyses and Pearson correlation coefficients are not applicable to ordinal level data. However, since the scoring of the questionnaire requires the weighting of individual item scores by multiplication, and the calculation of component scores by addition, this is an assumption that seems intrinsically embedded in the theory of planned behaviour. In addition, it is an assumption often made in the analysis of other questionnaire-based studies.

4.3) Interpretation of Results

4.3.1) Prediction of behavioural intention from theory of planned behaviour components

The most predictive component of the theory was direct perceived behavioural control. In this study, direct perceived behavioural control reflected the general sense of control participants felt they had over spending an average of 45 minutes or more per shift in focused 1:1 work with clients in the next month. This variable measured the perceived ease or difficulty of performing the behaviour specified.

The most obvious interpretation of this result is that perceived behavioural control, to some degree, reflects actual control. This may be in terms of external factors such as numbers of staff and operational policies. Ajzen (1991) suggests that perceived control may be considered a proxy for actual control when perceptions are accurate. In this study, it is not possible to compare perceived and actual control. This is because few measures of actual control were included. However, one measure of actual control was included which was staff:client ratio. This was not significantly associated with behavioural intention.

What can be stated with more confidence is that intention was significantly predicted by participants' beliefs about the ease or difficulty of performing the specified behaviour. The beliefs may have been accurate or inaccurate. Ajzen (1991) suggests that responses to direct perceived control items may be relatively automatic, and based on past experience. In some cases, participants may not be engaging in the behaviour due to these beliefs. The beliefs then become self-maintaining because that there is not an opportunity for them to be tested out. For example, difficulties in engaging in the behaviour experienced during a period of poor management or staff shortage may then become internalised, and self-maintained even when more staff are recruited or the unit manager changes. This may have particular relevance for staff transferring to community settings from hospital-based, institutional settings, where opportunities for client contact were limited.

According to the theory, indirect, belief-based measures of control are considered to be the antecedents of direct perceived behavioural control. In this study, indirect perceived behavioural control was significantly associated with both direct perceived behavioural control and behavioural intention. This provides support for the theory. One could consider many of the comments made on the questionnaire as control beliefs. Many of the questionnaire comments reflected beliefs about control which were mainly related to external resources or demands. Examples included low staff:client ratio and other work tasks. However, when individual items from the indirect perceived control measure are considered, a slightly different picture emerges. The only predictive individual items were beliefs about feeling in the right frame of mind to spend time in focused 1:1 work, having enough staff, having supportive colleagues and there being good unit morale. The belief about having enough staff is consistent with the comments made on the questionnaire. However, the belief about feeling in the right frame of mind reflects individual motivation. Beliefs about supportive colleagues and

good unit morale reflect the extent to which the work environment was experienced as pleasant and supportive. In summary, it appears that beliefs about a range of factors contribute to the overall sense of control felt by the participants in the study.

It was of interest that neither attitude or subjective norm were significantly associated with the intention measures. Scores on the direct attitude scale were generally high. It is possible that any predictive value of the variable is reduced by the fact that the majority of participants evaluated the behaviour very positively. For indirect attitude, the procedure recommended for belief derivation may not have generated the most salient beliefs as regards behavioural intention. The derivation procedure involved asking participants what they considered the advantages and disadvantages of engaging the behaviour. This may have generated beliefs which were salient to the participants notions of whether engaging in the behaviour promoted a high quality of care, rather than beliefs relevant to their intentions to engage in the behaviour. With hindsight, it may have been preferable to ask participants what they liked and disliked about engaging in focused 1:1 work, which focuses responses on personal preference, instead of using the terms advantage and disadvantage.

Overall, the data suggest that regardless of attitudes towards the behaviour, or perceived social pressure to engage in the behaviour, the crucial issue in predicting intention in this study was whether participants believed they had control over whether or not they engaged in the behaviour. Open-ended comments on this issue were largely dominated by control beliefs related to external resource factors. However, when other specific beliefs were individually assessed, other control factors such as personal motivation and a pleasant work environment proved to be significantly associated with intention. It is of interest that, although attitude and subjective norm measures were not predictive, individual predictive control beliefs include items that are relevant to personal motivation (feeling in the right frame of mind), external resources (enough

staff) and the social environment (supportive colleagues and unit morale). It is possible that all salient beliefs were located within the control component of the theory at the belief derivation stage of questionnaire design. This would have protected members of staff from perceived criticism, since they would not have considered themselves responsible for factors outside their control.

In this study a large proportion of the variance in intention was not explained by the variables considered. Other factors must also contribute to understanding the variance in behavioural intention. Factors relevant to each individual setting, but not across settings, may have been of relevance, but not detected in this study. These may have included the individual clients, the organisational dynamics of each setting, and even geographical location. There may have been other common predictive factors not assessed by the study. For example, attitudes towards other competing job tasks, such as administration, may have been of predictive value.

4.3.2) Job satisfaction

For global job satisfaction, eight percent of the variance was predicted by direct perceived behavioural control. This was consistent with the results of the meta-analysis reported by Spector (1986) relating measures of perceived control to different facets of job satisfaction. Spector considered a general perceived sense of control, which suggests that the direct perceived behavioural control measure in this sample reflected a more general sense of control at work. This is further supported by studies which have found positive correlations between the degree of internal locus of control and a range of work variables such as job performance, work motivation and job satisfaction. Spector (1988) developed the Work Locus of Control Scale, which has also been shown to correlate with job satisfaction (Moyle, 1995). In this study, direct perceived behavioural control about spending time in focused 1:1 work may be representative of a more generalised sense of control at work.

For intrinsic job satisfaction, the most predictive variable was continuous behavioural intention which accounted for 10 percent of the variance. This provides support for the idea that intrinsic job satisfaction is linked to the amount of time spent in direct work with clients. It should be noted that behaviour over the past month was only slightly less correlated with intrinsic job satisfaction. This suggests that both past behaviour and future intentions are associated with intrinsic job satisfaction. The addition of direct perceived behavioural control predicted a further six percent of the variance in the regression. The association between perceived control and intrinsic job satisfaction was also found in the meta-analysis by Spector (1986). Again, this result suggests that the direct perceived behavioural control measure may be representative of a general sense of control at work. Although direct perceived behavioural control and behavioural intention both correlated with intrinsic job satisfaction at around the figure of .30, the regression model suggests that their contribution to the variance is relatively independent. One interpretation for this is that the results reflect the common association between intrinsic job satisfaction and perceived control, and an association between the amount of time spent with clients and intrinsic job satisfaction which is specifically relevant to this occupational group. Although the proportion of variance explained by the measures of behaviour and behavioural intention is relatively modest, it needs to be considered in context. The mean length of time spent in focused 1:1 work was 33 minutes per shift, which is only seven percent of an 8 hour shift. Other aspects of the work would also be expected to contribute, including time spent with clients that was not considered by the study. Hence, time spent specifically in focused 1:1 work with clients seems to make a small but significant contribution to the intrinsic job satisfaction of staff members.

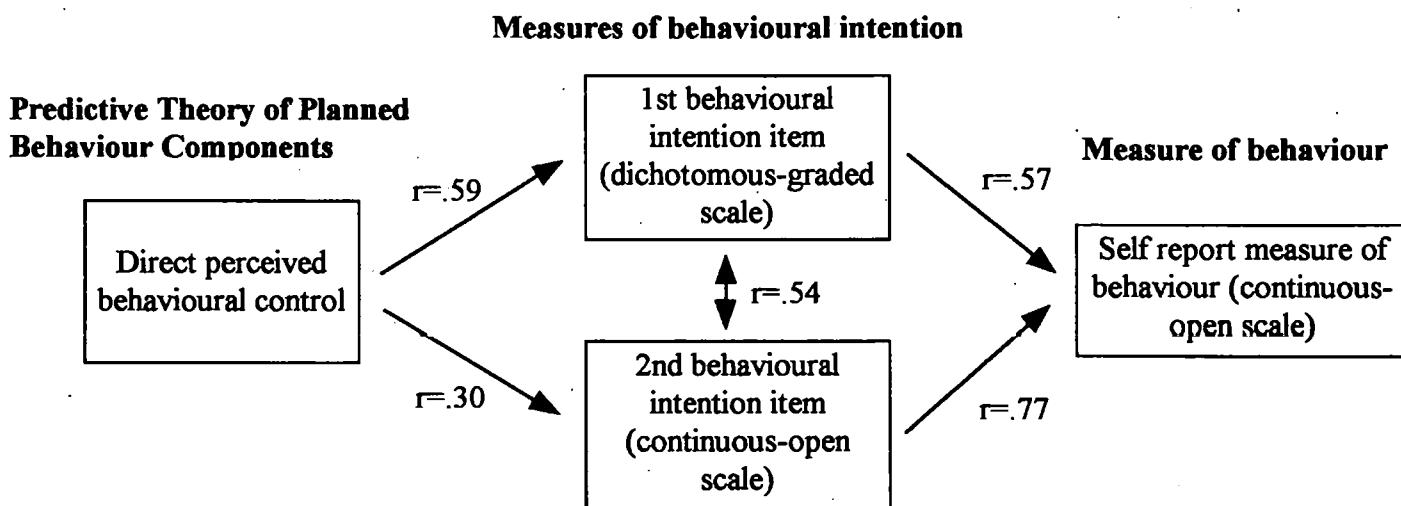
Overall, the results of this study suggest that in considering the job satisfaction of direct care staff working with people with learning disabilities, a general sense of

control at work, and time spent in focused 1:1 work with clients make modest but significant contributions to the understanding of this construct.

4.3.3) Applying the theory of planned behaviour to a repeated behaviour

In addition to investigating time allocation to focused 1:1 work, the study provided an opportunity to consider the issue of applying the theory to a repeated behaviour. This is of relevance to this study, since it considers the predictive validity of the theory in relation to actual behaviour. It also has wider relevance to clinical and health psychology since many applications of the theory consider behaviours related to physical and mental health. Many of these behaviours are repeated, and examples include engaging in exercise and smoking. To aid discussion, a diagram representing the relationships found is provided below in Figure 4. Only direct perceived behavioural control is included from the theory of planned behaviour components, as it was the most predictive of both measures of intention.

Figure 4 - Relationships between theory of planned behaviour components, measures of behavioural control and self-reported measure of behaviour



In the study, participants were asked to consider all their responses in relation to a given amount of time allocated to focused 1:1 work. This was in line with the recommendations made for applying the theory to repeated behaviours. The theory

suggests that in this case, one expects the components of the theory to predict a measure of behavioural intention that relates to that amount of time better than an open-ended measure that simply asks how much time the person intends to spend on that behaviour. This is supported in this study, such that the components predict the dichotomous behavioural intention measure more successfully. However, although the association between the theory components and the continuous intention measure is not as strong, it is still significant. This suggests that answers to questions about a specific amount of the behaviour do still have some predictive value in relation to how much of the behaviour they intend to engage in. This is also reflected in the significant correlation between the two intention measures.

For the prediction of actual behaviour, the continuous behavioural intention measure is more powerful than the first. This is consistent with the results reported by Courneya (1994), who considered the relationships between different measures of intention and behaviour. As such the results of this study indicate that a dichotomised measure of behavioural intention is not the optimum strategy in predicting actual behaviour, where the behaviour is, in reality, continuous. Again, it should be noted that the dichotomised measures are still significantly predictive, but not as effective as the continuous measures.

For the theory of planned behaviour, there appears to be a dilemma. In considering repeated behaviour, the type of behavioural intention scale best predicted by the theory is not itself the best predictor of actual behaviour. Courneya (1994) suggests that one important issue in considering this problem, is that intention can be considered to have two sub-components. These can be labelled choice or goal, and commitment or expectation. In a traditional measure of intention, the choice component is usually dichotomised by fixing it at some arbitrary point to obtain an either/or choice. If one accepts this distinction, the dichotomous behavioural intention item in this study

measured the commitment or expectation component by fixing the average time per shift figure at 45 minutes. The second behavioural intention item measured the choice or goal sub-component of intention only. As Courneya suggests, the ideal measure of intention for repeated behaviours might include items to assess both choice and commitment.

This distinction is helpful, in that it suggests that the theory of planned behaviour is of most utility for predicting the commitment or expectation sub-component of behavioural intention. Indeed, the dichotomisation of behaviour prevents any attempt at prediction of the choice or goal sub-component taking place. In this study the theory of planned behaviour components were found to predict this sub-component, but to a modest degree. It would seem that a desirable development would be some modification to the theory of planned behaviour to enable it to predict how much time an individual wants to spend on a behaviour, or how often they want to do it. At present, the theory suggests that perceived behavioural control, subjective norm, and attitude need to be assessed for all amounts or frequencies of the behaviour in question. In some instances this may be acceptable, especially if the task could be simplified by assessing theory components in relation to ranges of frequency or time spent. However, a more eloquent solution would be to identify factors that would predict the choice or goal sub-component in a linear fashion. It is of interest that in this study the two intention measures were significantly correlated, suggesting that to some extent those with a higher commitment to engaging in a certain level of the behaviour, tended to engage in more of it. Further research would be needed to develop factors that would increase the prediction of the choice or expectation sub-component. Intuitively, it would seem that beliefs relating to the amount of behaviour engaged in would be relevant. For example, the belief that the more a behaviour is engaged in, the better the consequences might be of relevance.

4.4) Clinical and Service Implications

4.4.1) Interventions involving spending time in focused 1:1 work with clients

A wide range of important interventions implicitly rely on members of staff spending time in focused 1:1 work with clients. Examples range from functional communication training, as an intervention for challenging behaviour, to psycho-sexual counselling for clients conducted by direct care staff. An accurate assessment of the needs of the individual is needed to plan appropriate interventions, and this individualised knowledge is dependant on enough time being spent with the individual, developing a detailed understanding of them.

Many interventions, implemented within a staff team or suggested by an external professional, are promoted on the basis of a rationale for implementation. Often the potential benefits of the intervention are emphasised. Although it is important to provide a rationale for intervention, the results of this study suggest that it would also be of value to consider staff perceived control about being able to allocate time to the intervention. Chamberlain & White (1986) note that staff training courses in skills teaching often fail to translate into actual gains in terms of more skills teaching taking place. Perhaps an important mediating variable is perceived control to devote time to this activity, which in turn may reflect a more generalised sense of control.

One obvious implication is to include some discussion about perceptions of control for time allocation at the planning stage for interventions. Simply checking whether or not the staff involved believe a given intervention is possible to implement may be a valuable procedure. It is important to note that real and perceived control would need to be considered. In some circumstances perceived control may reflect real control, and the resource implications of a given idea may need consideration. In other circumstances, additional resources may be poorly utilised due to control beliefs not being updated to reflect the changed situation.

4.4.2) Increasing time spent in focused 1:1 work

Although it is acknowledged that it would not be productive to blindly increase the amount of time staff spend in this way, there are many situations in which additional time spent in focused 1:1 work would be of value to the recipients of the service.

A number of existing studies have attempted interventions to try and increase the levels of staff-client interaction. Some studies have used external reinforcers such as supervisor praise (Montegar, Reid, Madsen & Ewell, 1977), time off work (Iwata, Bailey, Brown, Foshee, & Alpern, 1976), and monetary rewards (Katz, Johnson, & Gefland, 1972). Although successful, it is suggested that these interventions are expensive in terms of money and time, and offer only relatively short-lived effects after the intervention has ended (Burg, Reid & Lattimore, 1979). Other intervention studies have focused on strategies that promote forms of staff self-management in increasing interactions with clients. Baldwin & Hattersley (1984) implemented a self-monitoring procedure for staff on a ward with 18 clients. This involved setting behavioural targets for time spent with clients and teaching staff a method of self-recording. Results indicated a steady increase in staff interaction with clients, a decrease in time spent not in interaction with a client, and a decrease in disruptive and aggressive client behaviour. These gains were maintained at 2, 4 and 12 months follow-up. Burgio, Whitman & Reid (1983) conducted a similar study, teaching a self-management package consisting of self-monitoring, standard setting, self-evaluation and self-reinforcement procedures. Again, staff-client interaction and appropriate client behaviour improved.

The results of the present study suggest that interventions that promote a sense of control are likely to be of value. Baldwin & Hattersley (1984) explicitly state that their intention was to engage staff in a way that maintained their investment in the intervention. In their study, the psychologist acted as a facilitator at staff meetings

where possible strategies to improve interaction were discussed. Burgio et al (1983) based their study design on the notion that a high degree of perceived control would lead to an effective intervention. It would seem that interventions for staff based on self management procedures are the most effective in promoting a sense of control. It is also possible that interventions relying on external reinforcement do not have this effect, and are therefore not maintained effectively.

Intuitively, self-management techniques seem a logical intervention for promoting a sense of control. Teaching skills such as goal-setting, self-monitoring and self-appraisal may in itself enhance a sense of control. In addition, the actual process of implementing such a procedure provides a framework within which control beliefs can be subjected to some degree of empirical evaluation, similar to the notion of a 'behavioural experiment' in cognitive therapy (Beck, Rush, Shaw, & Emery, 1979). This process of evaluation creates opportunities for change in control beliefs in the light of new information. In this study, questionnaire comments from some staff suggested that participating in the study had functioned as a self-monitoring task. The comments reflected participants' motivation to attempt to increase the amount of time they spent in focused 1:1 work with clients. This process would have included the opportunity to check out control beliefs about time allocation to this activity.

There may be other interventions that may promote a sense of control. At the individual level this may include techniques such as time management. Interventions at the level of the team or organisation may also be valuable, such as regular meetings to develop ideas which facilitate time being spent in interaction with clients, or in focused 1:1 work. Involvement in these types of meetings may well promote a sense of belonging, involvement in decision making, and enhance a sense of control. The importance of these organisational factors may be reflected in this study by the

associations between behavioural intention and specific control beliefs such as unit morale and the supportiveness of colleagues.

4.4.3) Staff management and resource allocation

In this study, staff:client ratio was not significantly associated with behavioural intention. However, there was a significant association between specific control beliefs about having enough staff to facilitate time spent in focused 1:1 work with clients and intention. Given the relatively modest variation in staff:client ratio in the sample studied for this study, one could only tentatively suggest that staff:client ratio is of limited importance in predicting intention to spend time in focused 1:1 work. However, a number of observational studies suggest that the relationship between staff:client ratio and time spent in staff-client interaction is relatively weak. Despite this, it seems difficult to accept that staff:client ratio could be safely disregarded. Even purely as a limiting factor, it would intuitively seem important. Perhaps what one can conclude is that the relationship is complex, but that control beliefs about having enough staff are of relevance.

For those involved in managing staff and staffing resources, there are a number of implications from the study. It would seem that assigning more staff members is not necessarily an effective intervention for increasing time in interaction or focused 1:1 work. However, complaints about the adequacy of staffing should be considered seriously, as this belief was one of the specific control beliefs associated with behavioural intention in this study, and may also reflect a more general sense of control. Specifically, it may be of value to consider issues around control and time allocation as part of the supervision process for individual members of staff. The relationships found between control, time spent in focused 1:1 work and job satisfaction suggest that the opportunity for spending time in this way is one issue to be considered when considering staff well-being. For the manager, it may also be of

benefit to adopt a style which promotes involvement in decision making, and encourages creative solutions to problems of time allocation. In situations where it is considered appropriate to allocate additional staff, it is suggested that additional staff are deployed in the context of a strategy concerning how the additional time will be utilised. There is some evidence that outcomes are better when extra staff are deployed in the context of a management procedure such as room management (Mansell, Felce, Jenkins & de Kock, 1982).

4.5) Future Research

This study raises a number of possibilities for future research, both in relation to the subject investigated, and more generally, in relation to the theory of planned behaviour.

4.5.1) Future research relating to time spent in focused 1:1 work with clients

There have been a number of observational studies of staff-client interaction, and this study has investigated time spent in focused 1:1 work with clients from the perspective of the individual staff member. Future research could consider the relationship between these two perspectives, investigating observed differences between staff members in terms of their experiences of the work they have been observed engaging in. Further validity would be added by including the perspective of the clients being cared for, in terms of outcome and individual experience.

An interesting possibility would be to conduct an intervention project, designed to increase staff-client interaction, which considered perceived control as a mediating variable.

It might also prove fruitful to study the issue of time spent in focused 1:1 work or interaction with clients in the wider context of time allocation. A model which considered relative attitudes and perceived priorities in relation to a range of

competing tasks might provide insight into how decisions are made about allocating time between competing job demands.

4.5.2) Implications for theory of planned behaviour

It would be of interest to attempt a replication and development of the findings of this study in relation to the application of the theory to repeated behaviours. In particular, it might prove valuable to consider how the theory might be developed to predict both the commitment or expectation and planning or choice elements of behavioural intention. If research developed along these lines, it would imply a tacit move away from the view that different amounts of the same behaviour need to be seen as different behaviours. An alternative view is that intention to engage in repeated behaviours actually consists of a plan about how much to do, and a commitment or expectation about the actual enactment of this plan.

4.6) Conclusions

The main finding from this study was the predictive value of direct perceived behavioural control in relation to behavioural intention, behaviour and job satisfaction. These findings imply the utility of interventions that increase staff members' sense of control over time allocation to focused 1:1 work with clients. There is also an implication that future developments in the theory of planned behaviour could usefully consider the issue of predicting continuous measures of behavioural intention. In future research, it would be of value to conduct studies which involve both observed behaviour and the actual experiences of staff and clients in relation to focused 1:1 work and staff-client interaction.

5) References

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Appendices

- 1) Draft information sheet and definition of focused 1:1 work
- 2) Behavioural intention survey
- 3) Information sheet
- 4) Definition of focused 1:1 time
- 5) Instruction sheet
- 6) Theory of planned behaviour questionnaire
- 7) Job Satisfaction Survey (Spector, 1985)
- 8) Approval from ethics committee

Appendix 1 - Draft Information sheet and definition

Research Information Sheet

Title

Understanding how learning disability care staff make decisions about spending "focused 1:1 time" with clients : Using the Theory of Planned Behaviour

Summary

Direct care staff working with people with learning disabilities undertake a demanding job with many competing demands on their time. During a typical shift, many different tasks have to be completed within the working time. This study aims to understand the factors that influence staff members' decisions to spend 'focused 1:1 time' with clients.

Focused 1:1 time is time spent with an individual client engaged in some form of activity or interaction which is focused on their developmental needs. It involves some degree of choice for staff member and client, and is therefore not part of the daily routine. These periods of time are more than brief, casual chats, and would generally last a minimum of 5 minutes. To clarify the definition, examples are provided below :

Focused 1:1 time	Not focused 1:1 time
Enabling a client to experience something new, for example taking someone to the cinema	Routine physical care activity, eg. getting dressed (unless part of learning that skill)
Supporting a client in acquiring a new skill, like operating the cooker	Routine house-keeping (cleaning, cooking etc.)
Spending time with a client talking about their goals and plans for the next 6 months	Watching TV with a client
Counselling a client about some issue in their life	Spending time with a group of clients.

Of course, there is a strong social pressure to spend time in this way, but any number of things might make this more or less likely. The purpose of the study is to **understand what these factors are**, not to criticise or check up on staff. By understanding the factors better, it is hoped the information can be used to help enhance the job satisfaction of the care worker and the quality of care for the client.

The study is based on a particular theory, called the Theory of Planned Behaviour. This has been used to develop a questionnaire, which forms the basis of the study. As job satisfaction is often considered to be linked to opportunities for spending work time with clients, a job satisfaction questionnaire is also included.

For those willing to participate in an extra part of the study it is also planned to observe how staff members spend time on different tasks. This will provide important extra information. For example, a staff member might intend to spend time taking a client to play squash, but an unforeseen problem, like staff sickness, might prevent this from happening. At the observation

stage, this would be picked up, emphasising that plans to spend time in a certain way can be blocked by factors which are out of the individual's control, and unpredictable.

Questionnaires are being distributed to all learning disability care in the Rockingham Forest Trust catchment area. Participation is entirely voluntary. All questionnaire responses are confidential and will be kept in a secure filing cabinet. No information will be fed back to the services involved in the study that will identify individual responses.

Once the study is completed, a summary of the main results and findings will be made available to its participants.

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Appendix 2 - Behavioural Intention Survey

Intention Survey

a) Time Spent in Past Month

1) In the **past month**, on average, what percentage of your working time per shift have you spent on 1:1 focused time with clients ?

_____ % per shift (please answer between 0 and 100)

2) In the **past month**, on average, how many minutes per shift have you spent on 1:1 focused time with clients ?

_____ minutes per shift

3) In the **past month**, on average, on how many occasions per shift did you spent focused 1:1 time with clients ?

_____ occasions per shift

b) Intentions for Next Month

1) In the **next month**, on average, how many minutes per shift do you **plan** to spend on 1:1 focused time with clients ?

_____ minutes per shift

2) In the **next month**, on average, how many minutes per shift do you **intend** to spend on 1:1 focused time with clients ?

_____ minutes per shift

3) In the **next month**, on average, how many minutes per shift do you **expect** to spend on 1:1 focused time with clients ?

_____ minutes per shift

4) In the **next month**, on average, **what percentage** of your working time per shift, do you plan to spend on 1:1 focused time with clients ?

_____ % (please answer between 0 and 100)

5) In the next month, on average, **how likely**, is it that you will spend 15 minutes or more per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

6) In the next month, on average, **how likely**, is it that you will spend 30 minutes or more per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

7) In the next month, on average, **how likely**, is it that you will spend 60 minutes or more per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

8) In the next month, on average, **how likely**, is it that you will spend 120 minutes or more per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

9) In the next month, on average, **how likely**, is it that you will spend 180 minutes or more per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

10) In the next month, on average, **how likely**, is it that you will spend 5% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

11) In the next month, on average, **how likely**, is it that you will spend 10% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

12) In the next month, on average, **how likely**, is it that you will spend 25% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

13) In the next month, on average, **how likely**, is it that you will spend 50% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

14) In the next month, on average, **how likely**, is it that you will spend 75% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

15) In the next month, on average, **how likely**, is it that you will spend 90% or more of your working time per shift on 1:1 focused time with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

16) Please make any additional comments or suggestions about how this question could be asked (although I'm sure you're fed up with it by now !).

Appendix 3 - Information Sheet

Research Information Sheet

Title

Understanding how care staff working with people with learning disabilities make decisions about spending their time in "focused 1:1 work" with clients : Using the Theory of Planned Behaviour

Summary

Direct care staff working with people with learning disabilities undertake a demanding job with many different pressures on their time. During a typical shift, many different tasks have to be completed within the working time, and decisions made about how to allocate time for different tasks and activities. These decisions can be influenced by many different factors ranging from resource issues, such as staffing levels, to individual client or staff characteristics. This study aims to understand the factors that influence staff members' decisions to spend time on focused 1:1 work with clients, which is defined overleaf. It is of value to study this aspect of the work, as it is often claimed to promote job satisfaction for the staff member involved, and is held to be one important component in the delivery of good-quality care.

The study is based on a particular theory, called the Theory of Planned Behaviour. This has been used to develop a questionnaire, which forms the basis of the study. As job satisfaction is often considered to be linked to opportunities for spending work time with clients, a job satisfaction questionnaire is also included.

Questionnaires are being distributed to all learning disability care staff in the Rockingham Forest Trust catchment area. Participation is entirely voluntary. All questionnaire responses are confidential and will be kept in a secure filing cabinet. No information will be fed back to the services involved in the study that will identify individual responses.

To participate in the study, please read the definition overleaf and complete both questionnaires. This normally takes about 30 minutes. There is an envelope provided for the confidential return of the questionnaires, which will be collected on an agreed date.

If you have any queries, please refer to the contact information below. Arrangements will be made to feedback the results of the study to those who are interested, and a brief written summary of the results will also be available.

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Appendix 4 - Definition of focused 1:1 work

Definition of "Focused 1:1 work with clients"

For the purposes of this study only, this term is defined as follows :

Focused 1:1 work with clients

- Time spent by an individual staff member with an individual client.
- More than 5 minutes long.
- The primary focus of the contact is the client.
- The primary aim of the work is to offer a client activities, interactions or experiences which are intended to contribute to their developmental needs. Examples include things that are intended to be enjoyable (including leisure activities), learning new skills, or supporting the client in experiencing something new.
- The intended aims of the work are not in addition, or secondary, to some other routine/ongoing activity.
- The person you are working with needs your involvement for the work undertaken.
- There is a degree of choice involved for the staff member in allocating their time in this way.
- The work **could** be part of a care plan, if the above parts of the definition apply, and if there is still some degree of choice involved for the staff member.

To illustrate the definition, 2 brief examples are given.

Example 1. You are a member of staff working alone on an early shift with a group of 4 people with learning disabilities. Today, they are all due to attend a day centre, and transport is arriving for them in about an hour's time. All of them need some degree of support with getting dressed and washed, and this has to be completed before the transport arrives. When you come to help the last person, called Steve, get ready you have 10 minutes left. As you assist Steve, you talk about the day ahead and answer some questions about what is going to happen at the day centre. Steve seems to enjoy talking to you, and you feel that the interaction has helped build your relationship with him. Steve puts his shoes on, but cannot tie his shoelaces. With no time to teach him, you tie his laces for him, and Steve is able to get on the transport and attend the day centre.

This example would not be considered as spending time on "focused 1:1 work". The developmental benefits, such as relationship building, are secondary to the primary task of getting Steve ready for the day centre, and there is very little choice for the staff member at this point. However, the time spent in this example is very valuable for Steve, and an important part of the work undertaken by a staff member.

Example 2. Later that day, Steve returns from the day centre. You have just finished writing up some notes in a file. You have about an hour before your shift ends. There are a number of things that need doing, including making a shopping list, cleaning the fridge and organising a trip for all 4 clients in a few weeks time. However, you decide that you will hand these over to the next staff member on shift, and find Steve and offer to spend some time working with him on learning to tie his shoelaces. Steve agrees to this, and you spend some time working with him on this. Steve makes some progress, although he also finds it frustrating at times. After about 20 minutes, the telephone rings. You agree with Steve that you will leave it there for today, and go to answer the telephone.

This would be considered as spending 20 minutes on “focused 1:1 work” with Steve. This is because the staff member chose to spend time in this way, initiating a joint activity with the clear intention of enabling Steve to acquire a new skill. Other important tasks had to be handed on to another staff member to enable this to take place. Other activities could have been substituted for the one in the example, such as taking Steve to the pub for a quick game of pool, which is his favourite leisure activity.

There are a number of important points to consider relating to this definition :

1) This is a definition which we are asking you to consider **for this study only, when you are completing the questionnaire**. You may have defined “focused 1:1 work” differently, which is quite reasonable. However, to ensure that everyone in the study is answering about the same concept, please **follow the above definition when completing the questionnaire**.

2) It is important to acknowledge that lots of other sorts of time spent on work with clients is also **extremely valuable**. Clients may benefit enormously from shorter interactions, and from relationships built while jointly engaged in the important tasks of everyday living. The purpose of the study is not to suggest that the definition above is the most important or valuable way to spend time with clients. However, to make the research useful it is necessary to focus on one of the many important aspects of your work.

3) The purpose of the study is to **understand** the factors that influence decisions to spend time in this way, **not** to criticise or check up on staff members. It is freely acknowledged that there may be factors that make it difficult or impossible to spend time in this way, and establishing the importance of these factors is central to the study.

4) Time spent in other ways is also **extremely important**. Your work involves a large number of tasks which have to be undertaken, and are essential to team functioning. Again, the study does not seek to undervalue these aspects of the work, but has focused on one element of your work to make the research project practical and prevent the questionnaire being unreasonably long.

Finally, some shorter examples of time spent that would, and would not, normally be focused 1:1 work with clients are provided below :

Focused 1:1 work	Not focused 1:1 work
Supporting a client in experiencing something new. For example, visiting a farm for the first time.	Direct physical care as part of a regular routine.
Talking with a client about their goals and plans for the next 6 months.	House-keeping activities and admin.
Supporting someone in engaging in a favourite leisure activity, such as going swimming.	Sitting with a client watching TV, where the client needed no support for this activity.
Counselling a client about some issue in their life.	Any time spent with a group of clients.
Helping a client in acquiring a new skill, eg. crossing the road.	Answering one-off questions from clients, or other interactions of less than 5 minutes.

Appendix 5 - Instruction Sheet

Spending time in 1:1 focused work with clients : Questionnaire based on theory of planned behaviour

Instructions

Please answer the questions in this survey in line with your initial responses. There is no need to spend a long time thinking about your answers. Please answer the questions according to :

- Your own current working practice (but not including time on night shifts when clients are asleep).
- Your current working setting.
- The people with learning disabilities you work with.

Please answer as accurately and honestly as you can. It is important to emphasise there are **no right or wrong answers**.

Some parts of the questionnaire may appear repetitive and the answers to some questions may seem obvious. This is because it has been designed according to a particular theory which means the questions have to be asked in this way. Please answer all the questions.

Many of the questions require you to answer by circling a number on a scale. Please circle the number which best describes your opinion. For example, if you strongly agree that regular exercise is beneficial to health the you would respond as follows :

Regular exercise is beneficial to health

Strongly agree **1** 2 3 4 5 6 7 Strongly disagree

The person in the next example slightly disagrees with the statement :

Regular exercise is beneficial to health

Strongly agree 1 2 3 4 **5** 6 7 Strongly disagree

The final example is of a person who has a neutral opinion, they neither agree or disagree with the statement :

Regular exercise is beneficial to health

Strongly agree 1 2 3 **4** 5 6 7 Strongly disagree

If you have any difficulties or questions when filling in the questionnaire, please telephone either of the numbers on the last page of the questionnaire. We would be happy to assist you. When you have answered all the questions, please complete the job satisfaction questionnaire and then put both questionnaires in the envelope provided ready for collection.

As a reminder, the definition of focused 1:1 work is as follows :

Focused 1:1 work with clients

- Time spent by an individual staff member with an individual client.
- More than 5 minutes long.
- The primary focus of the contact is the client.
- The primary aim of the work is to offer a client activities, interactions or experiences which are intended to contribute to their developmental needs. Examples include things that are intended to be enjoyable (including leisure activities), learning new skills, or supporting the client in experiencing something new.
- The intended aims of the work are not in addition, or secondary, to some other routine/ongoing activity.
- The person you are working with needs your involvement for the work undertaken.
- There is a degree of choice involved for the staff member in allocating their time in this way.
- The work could be part of a care plan, if the above parts of the definition apply, and if there is still some degree of choice involved for the staff member.

Thank you for your help with this research

Appendix 6 - Theory of planned behaviour questionnaire

Section One - Control Factors

General note : This questionnaire will ask you lots of questions about the following phrase:

"Spending an average of 45 minutes or more of time per shift on focused 1:1 work with clients over the next month"

This sounds long-winded, but is the same all the way through the questionnaire. It involves trying to think about the amount of time you will spend on focused 1:1 work on each shift **in the next month**. Although shifts will vary, the questionnaire is asking you to consider how much time you will spend on focused 1:1 time **per shift**, when it is **averaged out** across all the shifts.

This first section asks questions about factors that might it **easier or harder** to spend an **average of 45 minutes or more of time per shift on focused 1:1 work with clients over the next month**.

1) First, please evaluate these general questions :

a) If I wanted to, I could easily spend this amount of time in 1:1 focused work with clients in the next month...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

b) Spending this amount of time in 1:1 focused work with clients in the next month would be...

Very easy 1 2 3 4 5 6 7 Very difficult

c) How much control do you feel you have over whether you do or do not spend this amount of time in 1:1 focused work with clients in the next month ?

Complete control 1 2 3 4 5 6 7 No control

d) How confident do you feel about your ability to spend this amount of time in 1:1 focused work with clients in the next month ?

Completely confident 1 2 3 4 5 6 7 Not confident

2) Now, on shifts in the next month, please rate how often each of the following would occur :

a) I would feel in the right frame of mind to want to spend 1:1 focused time with clients...

Very often 1 2 3 4 5 6 7 Not at all often

b) That there would be enough staff to enable me to spend 1:1 focused time with clients...

Very often 1 2 3 4 5 6 7 Not at all often

c) That morale on the unit would be good...

Very often 1 2 3 4 5 6 7 Not at all often

d) That the colleague(s) I was working with would be supportive...

Very often 1 2 3 4 5 6 7 Not at all often

e) That there would be difficult or challenging behaviour from the clients I work with...

Very often 1 2 3 4 5 6 7 Not at all often

f) That I would have opportunities to make decisions about how to spend my time...

Very often 1 2 3 4 5 6 7 Not at all often

g) That there would be a high rate of staff sickness or absence for other reasons...

Very often 1 2 3 4 5 6 7 Not at all often

h) That there would be a lot of interruptions such as telephone calls or visitors to the unit...

Very often 1 2 3 4 5 6 7 Not at all often

i) That I would have a lot of other demands on my time...

Very often 1 2 3 4 5 6 7 Not at all often

j) That there would be money available to spend on facilitating 1:1 time with clients...

Very often 1 2 3 4 5 6 7 Not at all often

3) Now please rate the extent to which each of these factors would make it *easier or harder* to spend an average of 45 minutes or more of time per shift on focused 1:1 work with clients over the next month...

a) Feeling in the right frame of mind would make this...

Much easier 1 2 3 4 5 6 7 Much harder

b) Having enough staff would make this...

Much easier 1 2 3 4 5 6 7 Much harder

c) Good morale on the unit would make this...

Much easier 1 2 3 4 5 6 7 Much harder

d) Having a supportive colleague(s) working with me would make this...

Much easier 1 2 3 4 5 6 7 Much harder

e) Difficult or challenging behaviour from the clients I work with would make this...

Much easier 1 2 3 4 5 6 7 Much harder

f) Opportunities to make decisions about how to spend my time would make this...

Much easier 1 2 3 4 5 6 7 Much harder

g) A high rate of staff sickness or absence for other reasons would make this...

Much easier 1 2 3 4 5 6 7 Much harder

h) Having a lot of interruptions would make this...

Much easier 1 2 3 4 5 6 7 Much harder

i) Having a lot of other demands on my time would make this...

Much easier 1 2 3 4 5 6 7 Much harder

j) Having money available to spend on facilitating 1:1 time with clients would make this...

Much easier 1 2 3 4 5 6 7 Much harder

Section Two - Opinions of Others

In this section, the questions concern the opinions of other people about spending time on focused 1:1 work with clients. In particular, they ask if you think they would like you to spend an average of 45 minutes or more of time per shift on focused 1:1 work with clients in the next month.

1) Please consider whether each of the following people would like you to spend an average of 45 minutes or more of time per shift on focused 1:1 work with clients in the next month. If you are not sure, try to guess or imagine what you think their opinion would be.

a) At work, I generally feel under social pressure to do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

b) The co-workers I admire the most think I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

c) The general public think I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

d) In general, the clients I work with, think I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

e) The person I have formal supervision with thinks I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

f) The person managing the unit I work in thinks I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

g) The organisation I work for thinks I should do this....

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

h) The families of the clients I work with think I should do this...

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

2) Now, please rate how likely you are to do what these people think you should do with regard to spending an average of 45 minutes or more of time per shift on focused 1:1 work with clients over the next month.

a) I want to do what the clients I work with think I should do....

Not at all 1 2 3 4 5 6 7 Very much

b) I want to do what the person I have formal supervision with thinks I should do....

Not at all 1 2 3 4 5 6 7 Very much

c) I want to do what the person managing the unit I work in thinks I should do...

Not at all 1 2 3 4 5 6 7 Very much

d) I want to do what the organisation I work for thinks I should do....

Not at all 1 2 3 4 5 6 7 Very much

e) I want to do what the families of the clients I work with think I should do....

Not at all 1 2 3 4 5 6 7 Very much

Section Three - Attitudes and Beliefs

This section asks questions about your attitudes to spending time on focused 1:1 work with clients.

1) First, please answer these general questions :

a) In my opinion, in the next month, on average, spending 45 minutes or more of my time per shift on focused 1:1 work with clients would be :

Very good 1 2 3 4 5 6 7 Bad

Not enjoyable 1 2 3 4 5 6 7 Very enjoyable

Very rewarding 1 2 3 4 5 6 7 Unrewarding

Extremely valuable 1 2 3 4 5 6 7 Worthless

Harmful 1 2 3 4 5 6 7 Very beneficial

Very satisfying 1 2 3 4 5 6 7 Unsatisfying

2) Now, please rate how likely each of the following consequences would be if you spent an average of 45 minutes or more of time per shift on focused 1:1 work with clients in the next month.

a) My job satisfaction would be enhanced....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

b) It would help the client develop skills....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

c) It would be emotionally taxing or draining for me....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

d) I would be less available to the overall group of clients I work with....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

e) It would provide the client with chances to make choices....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

f) I would not complete all the jobs I needed to before the end of the shifts....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

g) It would help me build good relationships with clients....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

h) It would help clients make positive changes in their lives....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

i) The clients would behave in a way that was stressful for me during the 1:1 time....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

j) It would help to prevent difficult behaviour in general....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

k) It would promote unhealthy, dependent relationships between myself and clients....

Highly likely 1 2 3 4 5 6 7 Highly unlikely

3) Please rate how desirable and undesirable each of these consequences would be in your opinion.

a) Enhancing my job satisfaction is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

b) Clients developing skills is.....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

c) Feeling emotionally taxed or drained is.....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

d) Being less available to the overall group of clients I work with is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

e) Clients having the chance to make choices is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

f) Not completing all the jobs I need to before the end of shifts is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

g) My building good relationships with clients is.....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

h) Clients making positive changes in their lives is.....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

i) Clients behaving in a way that is stressful for me is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

j) Preventing difficult behaviour is....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

k) Promoting unhealthy, dependant relationships is between myself and clients is.....

Highly desirable 1 2 3 4 5 6 7 Highly undesirable

Section Four - Past and Future Behaviour

1) Past Month

a) During the **past month, on average**, how many **minutes per shift** of your working time have you spent on focused 1:1 work with clients ?

Answer : _____ minutes per shift

2) Next Month

a) In the **next month, on average**, how likely is it that you will spend **45 minutes or more** of your time **per shift**, on focused 1:1 work with clients ?

Very likely 1 2 3 4 5 6 7 Very Unlikely

b) In the **next month, on average**, how many **minutes per shift** of your working time do you intend to spend on focused 1:1 work with clients ?

Answer : _____ minutes per shift

3) Comments - Please add any additional comments you would like to make.....

Section Five

This section simply asks about a few personal details which will remain confidential.

- 1) How old are you ? _____ years
- 2) Are you male/female ? (please delete)
- 3) Are you qualified/unqualified ? (please delete)
- 3a) If qualified, please state how long ? _____ years
- 4) How long have you worked with people with learning disabilities ? _____ years
- 5) What is your job title (optional) ? _____
- 6) Date of completing this questionnaire is ____/____/1998

As part of this research it will be necessary to re-contact a random sample of participants. Some of these will be asked to answer just one further question, and others will be asked to fill in the questionnaire one more time. This enables us to check if people's responses remain constant over time and is a normal procedure in this type of research. If you are willing to be re-contacted for either purpose, please provide your name and address below. This information will remain confidential and will only be used for this purpose. Your name and address will not be passed on to anyone else, and the records destroyed when the research is completed.

Name
(optional) _____

Work
address
(optional) _____

Postcode
(optional) _____

I am willing to answer one more question at a later date (tick box) ☐

I am willing to complete the questionnaire again at a later date (tick box) ☐

Thankyou very much for completing the questionnaire. If you have also completed the job satisfaction questionnaire, please seal both in the envelope provided, and all completed questionnaires will be collected on an agreed date.

If you require any further information, please contact....

Paul Flecknoe
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Headington
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OX3 7JX. Tel : (01865) 226431

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Wymington Road
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Appendix 7 - Job Satisfaction Survey (Spector, 1985)

Job Satisfaction Survey (Spector, 1985)

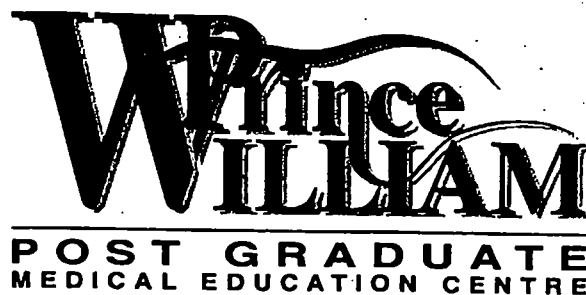
		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1	I feel I am being paid a fair amount for the work I do	1	2	3	4	5	6
2	There is really too little chance for promotion on my job	1	2	3	4	5	6
3	My supervisor is quite competent in doing his/her job	1	2	3	4	5	6
4	I am not satisfied with the benefits I receive	1	2	3	4	5	6
5	When I do a good job, I receive the recognition for it that I should receive	1	2	3	4	5	6
6	Many of our rules and procedures make doing a good job difficult	1	2	3	4	5	6
7	I like the people I work with	1	2	3	4	5	6
8	I sometimes feel my job is meaningless	1	2	3	4	5	6
9	Communications seem good within this organisation	1	2	3	4	5	6
10	Raises are too few and far between	1	2	3	4	5	6
11	Those who do well on the job stand a fair chance of being promoted	1	2	3	4	5	6
12	My supervisor is unfair to me	1	2	3	4	5	6
13	The benefits we receive are as good as most other organisations offer	1	2	3	4	5	6
14	I do not feel that the work I do is appreciated	1	2	3	4	5	6
15	My efforts to do a good job are rarely blocked by red tape	1	2	3	4	5	6
16	I find I have to work harder at my job because of the incompetence of the people I work with	1	2	3	4	5	6
17	I like doing the things I do at work	1	2	3	4	5	6
18	The goals of this organisation are not clear to me	1	2	3	4	5	6

		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
		1	2	3	4	5	6
19	I feel unappreciated by the organisation when I think about what they pay me	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates	1	2	3	4	5	6
22	The benefit package we have is equitable	1	2	3	4	5	6
23	There are few rewards for those who work here	1	2	3	4	5	6
24	I have too much to do at work	1	2	3	4	5	6
25	I enjoy my co-workers	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organisation	1	2	3	4	5	6
27	I feel a sense of pride in doing my job	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases	1	2	3	4	5	6
29	There are benefits we do not have which we should have	1	2	3	4	5	6
30	I like my supervisor	1	2	3	4	5	6
31	I have too much paperwork	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be	1	2	3	4	5	6
33	I am satisfied with my chances for promotion	1	2	3	4	5	6
34	There is too much bickering and fighting at work	1	2	3	4	5	6
35	My job is enjoyable	1	2	3	4	5	6
36	Work assignments are not fully explained	1	2	3	4	5	6

Appendix 8 - Approval from Ethics Committee

Prince William Post Graduate Centre
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18th March, 1998

Dr. P. Hopkinson
Consultant Clinical Psychologist
Clinical Psychology Services
Learning Difficulties Specialty
Rushden Hospital
Wymington Road
Rushden


Dear Dr. Hopkinson

**UNDERSTANDING HOW LEARNING DISABILITY CARE STAFF MAKE
DECISIONS ABOUT SPENDING TIME WITH CLIENTS: USING THE
THEORY OF PLANNED BEHAVIOUR**

Further to your letter of the 28th January, 1998 re the above I write to confirm that
Ethical/Research approval is not required for this study.

Thank you for contacting me.

Yours sincerely


M. R. Newman
Chairman